REPORT RESUMES

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HOME ECONOMICS TEACHERS, PRESERVICE AND INSERVICE LEVELS, THEIR INTEREST IN TEACHING, THEIR ATTITUDES TOWARD CHILDREN AND FAMILIES.

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MAJOR QUESTIONS EXPLORED IN THIS COOPERATIVE RESEARCH STUDY WERE--(1) WHAT ARE THE ATTITUDES OF PRESENT AND PROSPECTIVE HOME ECONOMICS TEACHERS TOWARD CHILDREN, TEACHING, AND INDIVIDUALS AND GROUPS DIFFERENT FROM THEMSELVES, (2) WHAT EARLY COLLEGE EXPERIENCES MIGHT MODIFY THESE ATTITUDES, AND (3) WHAT EXPERIENCES AS JUNIORS, SENIORS, AND FIRST-YEAR TEACHERS INFLUENCE ATTITUDES. REPRESENTATIVES FROM SIX INSTITUTIONS IN SIX STATES PLANNED AND CARRIED OUT THE 10-YEAR STUDY USING MINNESOTA TEACHER ATTITUDE INVENTORY, JOHNSON HOME ECONOMICS INTEREST INVENTORY AND TEACHER DATA SHEETS TO DETERMINE ATTITUDES AND INTERESTS OF HOME ECONOMICS STUDENTS EARLY IN THE COLLEGE PROGRAM, LATER IN THE COLLEGE YEARS, AND AFTER SOME EXPERIENCE IN TEACHING. SOME GENERAL FINDINGS WERE--(1) MORE ACCEPTABLE ATTITUDES TOWARD CHILDREN WERE EVIDENT IN INDIVIDUALS WHO FELT THEIR TEACHING LOADS WERE SATISFACTORY, ENGAGED IN YOUTH ACTIVITIES, TAUGHT VOCATIONAL HOME ECONOMICS, HAD RECENTLY ENROLLED IN COLLEGE CREDIT COURSES, AND HAD FOUND SUPERVISION HELPFUL, (2) STUDENTS' ATTITUDES BECAME MORE FAVORABLE TOWARD CHILDREN BETWEEN FRESHMAN AND SENIOR YEARS, BUT LESS FAVORABLE DURING THE FIRST YEAR OF TEACHING, (3) STUDENTS CHOSE A CAREER IN TEACHING MORE FOR PRACTICAL REASONS THAN AS A RESULT OF EXPERIENCE PREVIOUS TO COLLEGE SUCH AS THAT RELATED TO CHILDREN OR HIGH SCHOOL HOME ECONOMICS COURSES, (4) INTEREST IN TEACHING DID NOT INCREASE SIGNIFICANTLY BETWEEN THE FRESHMAN YEAR AND THE FIRST YEAR OF TEACHING, AND (5) ATTITUDES TOWARD OTHERS DIFFERENT FROM THEIR OWN GROUPS CHANGED BUT TOWARD LESS POSITIVE ONES FROM THE JUNIOR YEAR TO THE FIRST YEAR IN TEACHING. MORE STUDY OF FACTORS POSSIBLY INFLUENTIAL IN THE FINDINGS WAS RECOMMENDED. (MS)

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HOME ECONOMICS TEACHERS - PRESERVICE AND INSERVICE LEVELS THEIR INTEREST IN TEACHING - THEIR ATTITUDES TOWARD CHILDREN AND FAMILIES

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June, 1966

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HOME ECONOMICS TEACHERS - PRESERVICE AND INSERVICE LEVELS THEIR INTEREST IN TEACHING - THEIR ATTITUDES TOWARD CHILDREN AND FAMILIES

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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FOREWORD

This bulletin deals with certain characteristics of home economics teachers: attitudes toward children, families, and teaching. These three characteristics were related to certain factors of background and experience in a longitudinal study of home economics teaching majors, while in college, and during their first year of teaching.

The study not only makes a valuable contribution to the understanding of certain selected characteristics thought to be particularly important in home economics teachers, but it also demonstrates a cooperative approach to planning and carrying out research. In 1953, a group of home economics teacher educators of the Central Region agreed, that through cooperation, a maximum use of limited time and funds could be made to find answers to questions about preservice and inservice education of teachers. Such a cooperative plan offered advantages to the researchers: a protracted period of investigation affording a perspective of years, not months; an extended geographic area permitting investigation of differences and trends within a region; and the personal sense of growth when researchers plan and carry out a study together. This cooperative research study was set up and carried on by staff members in higher institutions in six states.

The project was divided into three parts with staff at different institutions assuming responsibility, as follows: Attitudes Toward Children, University of Minnesota (Ella J. Rose and Roxana R. Ford assisted by Cyril J. Hoyt); Iowa State University (Hildegarde Johnson and Hester Chadderdon); and the Ohio State University (Ruth Lehman). Beulah Coon, then Specialist of Research in Home Economics Education, U. S. Office of Education, was chosen as coordinator of the study. Mary Lee Hurt, Research Specialist in the Division of Vocational and Technical Education, U. S. Office of Education, was responsible for coordinating the last phases of the study and the writing of the report.

Others assisting with various aspects of the research were Letitia Walsh, then at the University of Illinois and Beatrice O'Donnell at Michigan State University. At different times assistance was given with some parts of the project by Marie Dirks and Florence Davis at Illinois Normal University, June Cozine at Northwest Missouri Teachers College, and Alta Motter Adams and Pauline Garrett at the University of Missouri. Graduate students who assisted with the study were Mrs. Frances Szeman, Ohio State University, and Mrs. Jean Fackler Pinkerton and Helen Turck, University of Minnesota.

Consultants for the study included Cyril Hoyt, then Director of the Bureau of Educational Research, University of Minnesota; D. Ransom Whitney, Director of the Statistics Laboratory, and a member of his staff, Mrs. Lydia Kinser, Ohio State University; and Leroy Wolins, Associate Professor of Psychology and Statistics at Iowa State University. Arthur W. Foshay, then Director of the Bureau of Educational Research and Service, Ohio State University, and Ross Mooney, also in the Bureau, served as consultants when developing the "Teacher and the Community Inventory".

The project directors appreciate the contributions of thousands of home economics students and teachers who participated by checking the various instruments and by filling in personal data forms, the graduate assistants who worked on some part of the project, and the many typists in the various colleges who have assisted at different times.

A progress report on each aspect of the study appeared in a series of articles in the Journal of Home Economics, February to June, 1963, and was issued in a reprint by the American Home Economics Association. More detail than was possible to include in the articles is given in this bulletin which summarizes additional data and constitutes a final report of the study as a whole.

The report will be useful to (1) research workers who may find in it suggestions for cooperative research procedures; (2) graduate students who hope to make contributions to research; (3) personnel in teacher education who are concerned with students' development of interest in the teaching profession, as well as development of positive attitudes toward children and individuals and families whose values differ from their own; (4) and supervisors who will find suggestions for inservice education of teachers.

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Chapter I

INTRODUCTION

Beulah I. Coon

Maintaining a high quality of teacher education is a constant challenge to higher institutions and of much concern to schools employing teachers. The problems involved have special pertinence in a period when cataclysmic changes are occuring in society and new knowledge increasing continuously. Ideas differ radically about the way to carry on an effective teacher education program. The longitudinal study here reported is of an effort to find through research answers to some of the questions which arise. It was carried on by representatives of seven institutions with home economics teachers and prospective teachers in six states in the Midwest. This study reported here had two purposes--to focus on a few important outcomes of teacher education in home economics influenced by the rapidly changing environment existing in this country, and to capitalize on opportunities for a group of nearby institutions to cooperate in finding answers to important current problems in home economics teacher education.

For some time home economics education researchers had been carrying on individual investigations concerned with teacher education problems. In 1953, the Home Economics Education Branch of the United States Office of Education called a small group of home economics teacher educators to consider the possibilities of pooling resources in a cooperative research project.[1]

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[1] For background of this project, see
Coon, Ford, et al. "Cooperative Research in Home Economics Education," Journal of Home Economics (February and March 1962). Also Reprint with the same title (Washington, D.C.: American Home Economics Association, 1962).

The seven institutions involved were located near enough together to enable representatives to meet for planning, revision of plans and assessment of progress throughout the period of a study. The interest of the group at the 1953 meeting induced them to begin immediate consideration of what might be done. The study was completed in 1963.

The Project Chosen for Cooperative Research

One of the first activities was to set up criteria to guide their choice of a project. They agreed it should be:

Fundamental to home economics education

Of interest to personnel in several institutions in addition to their own

One having long-time values

One having implications for a larger area than the Central Region

One using, as far as possible, instruments or techniques fairly well developed

One which could show results in a reasonable length of time (five to seven years)

One feasible in terms of personnel, funds, and time available in the region

These criteria recognized limitations within the institutions as well as group's sense of responsibility to others in the same field of work.

Several current projects underway in these institutions concerned aspects of the preservice and inservice education of teachers which had relevance to home economics teacher education. A cooperative project provided an opportunity to deepen and extend the scope of such studies. The proximity of the participating institutions made the utilization of these projects feasible. An analysis of questions arising in the investigations in progress and other questions troubling teacher educators led to the decision to study "Certain Characteristics of Prospective Home Economics Teachers and Associated Factors." Other studies involving characteristics of teachers also influenced the decision.

The most extensive of the current projects involved 100 separate investigations and 6,000 teachers in 1,700 schools and dealt with "Characteristics of Teachers--Their Description, Comparison and Appraisal."[2] An extensive earlier project by Charters and Waples also dealt with teacher characteristics.[3] A series of studies at the University of Minnesota, one of the participating institutions, was focused on teachers' attitudes toward children.[4] Members of the home economics education staffs of three of the cooperating institutions, Iowa, Ohio, and Minnesota, had been studying student and teacher values. These studies could be built upon and coordinated into the more encompassing one envisioned by this group.

Assumptions, Objectives, and Hypotheses

Having decided upon the criteria and the overall topic to be studied, the group decided upon the general assumptions, objectives and hypotheses to serve as a guide for the cooperative study. The investigation of certain characteristics of home economics teachers and associated factors was based on the following assumptions:

1. The teacher is the crucial element in the teaching-learning situation.
2. A special study of home economics teacher characteristics is needed. There are indications from nation-wide studies that teachers of different subject-matter areas vary in personal and social characteristics.
3. The shortage of home economics teachers and the expanding program in schools with increasing population emphasize the demand for more teachers. A study of certain characteristics should help to provide a better basis for recruitment and guidance.

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[2] Ryans, David G. Characteristics of Teachers--Their Description, Comparison and Appraisal (Washington, D.C.: American Council on Education, 1960), 416 pp.

[3] Charters, W. W. and Douglas Waples. The Commonwealth Teacher-Training Study (Chicago, Illinois: University of Chicago Press, 1929), 666 pp.

[4] Cook, Walter W., Carroll H. Leeds, and Robert Callis. Minnesota Teacher Attitude Inventory (New York: The Psychological Corporation, 1951).

4. Much of what is expected of home economics teachers by supervisors, school administrators, and communities assumes the presence of certain characteristics. Knowing which of these expectations can be realized helps to determine whether a different type of teacher is needed or whether expectations should be continued or modified.

5. The identification of characteristics and the direction and nature of changes and factors which seem to be associated with these characteristics should point to aspects of the preservice and inservice programs which should be maintained, strengthened or modified.

6. Reports by college students and teachers of pertinent background and experience will reveal some of the factors associated with attitudes.

The three overall objectives which guided the study were:

(1) To discover certain attitudes, beliefs and related characteristics of teachers and prospective teachers of home economics

(2) To discover changes taking place over specified periods of time

(3) To identify factors associated with certain specified characteristics

Two general hypotheses were to be explored:

a. That changes in personal and social characteristics of prospective home economics teachers take place during the college period and the first year of teaching.

b. That factors of background and experience are associated with certain characteristics of students and teachers of home economics education.

Limiting the Scope of the Project

Most other studies have been concerned with teachers in general at either the elementary or secondary school level or both. The home economics education research workers, however, deemed it essential to focus on some of the characteristics thought to be especially important for home economics teachers because of their concern for homes and families. The following were listed as possibilities:

1. Attitudes toward children and families
2. Social sensitivity to welfare of families
3. Conception of family and society
4. Acceptance of self as an individual

5. Acceptance by groups
6. Patterns of values and goals
7. Home economics interests - general and professional
8. Ability to work with groups

Because the institutions represented by the planning group were limited in funds and because members of the group were limited in time (all had responsibilities for teaching and for studies which needed to be completed) and experience in cooperative research, only a few of these possible characteristics could be studied.

Activities in progress in participating institutions and instruments available to help attain objectives of the study determined the choice of characteristics. The instrument developed at the University of Minnesota, the Minnesota Teacher Attitude Inventory (MTAI) which focused attention on part of the first characteristic, attitudes toward children, provided one possibility for beginning work on the cooperative project. Although this inventory had been developed with elementary school teachers, used with secondary school teachers of different subjects, and with prospective teachers, only a limited number of home economics teachers had been studied. It now provided a convenient means of studying attitudes of home economics students' and teachers' attitudes toward children.

The research worker at Ohio State University had made a study of attitudes of secondary school pupils,[5] and had also directed a long-time project aimed toward appraising progress of home economics undergraduate students toward some important general goals.[6] She was interested in trying to develop an instrument to determine attitudes of students and teachers toward families different from their own. Thus it would have some implications for the second characteristic, social sensitivity to welfare of families, as well as part of the first on attitudes toward families.

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[5] Lehman, Ruth. "Experimentation with Attitude Scales in the Area of Home and Family Life Education" (Dissertation at University of Chicago, 1945).

[6] Lehman, Ruth. "Appraising the College Program in Home Economics"(Washington, D.C.: The American Home Economics Association, 1950), 229 pp.

Two research workers at Iowa State University had developed an instrument to determine interest in 14 different professions in home economics, the Johnson Home Economics Interest Inventory.[7] This could be used in studying some aspects of interest in home economics teaching.

The Plan of Procedure

Situations in the institutions determined not only the particular characteristics selected for study but also the allocation of responsibilities among members of the group. Representatives of all institutions would participate in planning and in collecting data. One institution was responsible for analysis of all data on a given study. Representatives of the University of Minnesota, using the Minnesota Teacher Attitude Inventory, would carry major responsibility for the study on the attitude of home economics students and teachers toward children; Iowa State University staff members, using the Johnson Home Economics Interest Inventory, would head up the study on interest of teachers and prospective teachers in teaching home economics; the representatives from Ohio State University would try to develop an inventory to determine attitudes toward families and groups other than one's own.

It was necessary to make a longitudinal study to secure data on changes occurring in characteristics as indicated by the first hypothesis. Data were needed on home economics students early in the college program, later in the college years, and after some experience in teaching following graduation.

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[7] Ames, Iowa: The Iowa State University Press, 1955.

In addition to inventories revealing attitudes, students at different stages and later as teachers, therefore, gave information on those aspects of their background and experience which might be influential in relation to the characteristic being studied.

Such questions as the following were explored: What is the attitude of college students toward children, toward teaching, toward families? What factors in the freshman's background and experience seem to be related to attitudes toward children? What experiences during the early college years may be influential in modifying these attitudes? What experiences during the junior and senior years are associated with attitudes toward the profession, toward children, toward families? Do these attitudes change during the first year of teaching and if so, are there certain factors associated with these changes? In order to provide a basis for determining experiences which help to influence favorable attitudes and avoid unfavorable ones, data sheets were developed to identify factors associated with changes in characteristics at different developmental stages.

In addition to the longitudinal study, an investigation was made in the six states of attitudes toward children and related factors in a random sample of home economics teachers with a varied number of years of teaching experience. This part of the study provided data on home eoncomics teachers' attitudes which had not previously been available and supplemented information regarding attitudes of secondary school teachers in general toward children.

It was necessary in planning the longitudinal study to follow a rigid time schedule to avoid placing an undue burden on college students and on the researchers in each institution. Hence the study of attitudes toward children was begun first with college freshmen in the early fall of 1954 so that students preparing for teaching could be studied two years later as fall-term juniors, four years later in the spring of 1959 as graduating seniors, and the following spring as first-year teachers. Similar schedules were developed for the longitudinal study of professional interest and for acceptance of families. No one group was to participate in more than one part of the study during one term or semester.

Even though seven institutions participated, it proved to be difficult to secure an adequate number of students at the beginning of each part of the project to insure sufficient comparable data for the final years of the longitudinal study. For example, all home economics freshmen college students in the cooperating institutions were given the MTAI and the freshman data sheet in 1954. Most freshmen had not yet chosen a professional major, and those who later chose some home economics profession other than teaching were lost to the longitudinal study. Dropouts from these colleges also reduced the number. Still other graduates, though prepared for teaching, did not enter that profession the first year after graduation. Even by including students who transferred as juniors to these institutions to prepare for teaching, there were not enough first-year teachers for some statistical analyses. Because of different arrangements in the cooperating institutions, careful planning was necessary to insure comparability of data from all institutions. Some were on the quarter basis, some the semester, some had a quarter of student teaching and others six weeks. In some institutions many tests were given to entering freshmen and in others, very few. Yet, in order to be compared with data from institutions where freshmen had filled out the forms during the first two weeks of college, data for the study of other college freshmen could not be secured much later in the term. This situation led to directions such as, give early in the freshman term or early in the term in which the individual becomes a junior, or last quarter before graduation and after student teaching.

After a time schedule for the first project had been decided and the forms to be used were approved by the whole group, a copy of data sheets with detailed directions for use was sent by the representative of the responsible institution to participants in all institutions.

Though there are many ways of carrying on a cooperative project, the situation in the participating institutions dictated the way this one was carried out. In summary, representatives of all institutions assisted in the planning, in decisions concerning objectives and hypotheses, in the development of data sheets on which information about experiences and background were obtained, in the plan for analysis of findings, and the consideration of conclusions and implications. Each representative collected data sheets on which information about experiences and background were obtained, in the plan for analysis of findings, and the consideration of conclusions and implications. Each representative collected data on all parts of the study in her own institution and state. All data collected in a given part of the study were sent to the institution responsible for tabulation and analysis. That institution processed all data, carried through the detailed analyses planned with the group, and submitted a report of that part of the study to other members of the group for suggestions. A member of the Home Economics Education Staff of the U. S. Office of Education served throughout as coordinator of the project and assisted in the writing of the final report.

Advantages and Problems Involved in Cooperation

The opportunity for research workers in seven institutions in six neighboring states to work together on a common problem had many advantages. It was possible to make use of the facilities and the training and experience of several people. Data could be collected from a larger sample than is usually possible when only one investigator is responsible. By identifying similarities and differences between states and institutions, it was possible to determine what conclusions seemed justified for the region as a whole. When in the study of attitudes toward children there seemed to be differences between freshmen students in the two teachers colleges and in the land-grant colleges and universities, information was secured from additional teachers colleges in the six states to check further on the findings. Also when attitudes of teachers toward children in one state seemed less desirable than in others, a special study was made to try to locate possible causes.

Each member of the committee was stimulated by the opportunity to check her thinking against that of others on the committee who had somewhat different backgrounds of training and experience. The exchange of ideas was useful in each step of the cooperative process--the original choice of the project, the stating of objectives and hypotheses for the whole study and for each of its parts, and the choice of particular factors to be included in the data sheets at each stage of the longitudinal investigation of each characteristic. This give-and-take discussion was equally helpful in planning types of analyses to be made of the data and in considering types of conclusions which could be drawn from the findings.

Consultants in the different institutions were a stimulus not only to the representative responsible but also to the committee as a whole. Whenever the committee met, the consultant on the part of the study having most consideration at the time was usually available for all or part of the committee meeting. The consultant's participation provided viewpoints from still different backgrounds and spread his influence beyond his institution.

Issues discussed and conclusions reached contributed to the graduate program in the institutions through sharing with graduate students plans and decisions and through providing opportunity for interested students to make related studies which were useful in extending the information available to the committee. These students thus made a contribution to an ongoing project of interest to the whole region.

Those who participate in the planning and carrying out of a project are more likely than others to make use of the findings. By having a number of institutions and states participate in the planning and in the collection and analysis of data, a large number profited from the results of the study. The representatives from the different states kept others aware of processes and progress by making of progress reports at regional conferences for home economics educators. Also after each committee meeting, the Director of the Home Economics Education Branch in the United States Office of Education sent mimeographed progress reports of the study to state supervisors, teacher educators, and administrators of home economics in colleges and universities.

Carrying through a research project cooperatively not only yields advantages, but also involves problems not likely to occur in an individual study. Joint decisions can seldom be well made through correspondence. Meetings are necessary if the issues involved are thoroughly considered but they are costly in time and money. Annual meetings which were held as the project progressed proved to be so valuable that participants found the time and paid their own way when other funds were not available.

The limited funds and personnel in each institution carrying major responsibility were handicaps which could be met only by limiting the scope of the study or by extending the time of the investigation. These limitations also made it necessary to confine data to the 6 states with representatives on the committee rather than from all 12 states in the Central Region and from all institutions, as had been an early hope. Although the original plan was for a study lasting only five to seven years, it has taken over ten years to make the studies and report them.

Changes in personnel delayed progress at several stages. When one leader retired because of ill health, many adjustments had to be made by her successor in order to be able to carry the added responsibility. More rapid progress would have been possible if graduate assistants could have stayed on the project or new ones found to induct into the study. When one investigator accepted a position in another region, the part of the study for which she was responsible had to be reduced.

Sending data by mail proved to be a hazard. Part of the information collected by one institution on first-year teachers' attitudes toward families was lost--thus limiting the data available for that part of the longitudinal study.

Although most of these problems can be expected in any long-time cooperative research, the rewards of participation for this group of researchers offset the discouragement from problems encountered. Having data from several institutions and states provided a broader base for drawing conclusions than a more limited study. Differences found among states and institutions provided a stimulus to further investigation. The esprit de corps which was developed by cooperative work toward common goals was rewarding to all members of the committee working on this project. The opportunity to work with others who had somewhat different backgrounds was a rich learning experience for committee members.

Chapter II

ATTITUDES OF HOME ECONOMICS TEACHERS TOWARD CHILDREN

Roxana R. Ford

This chapter will present three aspects of that phase of the cooperative study dealing with attitudes toward children: the experienced teacher study, the longitudinal study, and a series of sub-studies.

It is commonly assumed that one who chooses teaching as a profession has some liking for children, and further, that those who have an "accepting" attitude are likely to be more effective teachers than are others. This assumption is of particular concern when home economics teachers are the locus of discussion for they not only direct the learning of adolescent or preadolescent youth but also include in their courses units of study involving learning experiences about children and their development.

Curriculums in home economics include courses to help prospective teachers learn more about homes, families, and individuals with the implicit expectation that increased knowledge will result in greater understanding and acceptance of persons who differ from themselves. Thus advisers--with goals of increased understanding in mind--encourage home economics majors to engage in summer activities with groups of children or adults and college teachers and often arrange for student contact with families or individual pupils. If such expectations are unrealistic in terms of the specific course objectives or indefensible in light of research findings, they may reflect an aspect of curriculum planning that warrants increased attention.

Hypotheses

Two major hypotheses were examined: (1) that changes in attitude toward children take place during the college period, and (2) that factors of background and experience of students and teachers are associated with such changes.

The following sub-hypotheses were explored in the experienced teacher phase of the study:[1]

Differences in attitude toward children (as measured by the Minnesota Teacher Attitude Inventory) will be found among:

(1) teachers of the six states studied
(2) graduates of the various institutions
(3) teachers employed in schools of different size
(4) teachers employed in schools which have a vocational, nonvocational, or combination program
(5) teachers who believe their loads to be excessive and those who do not
(6) teachers who believe supervisory assistance to be helpful and those who do not

Further, these differences will be related to:

(1) recency of enrollment in college credit courses
(2) amount of time spent in the supervision of youth groups
(3) amount of time spent in home visits and the guiding of home experiences
(4) amount of time spent in counseling
(5) amount of time spent in study hall duty

Data Collecting Devices

The major instrument for the collection of data was the Minnesota Teacher Attitude Inventory (MTAI).[2] The research committee preferred to use existing devices if appropriate and available. The MTAI seemed to meet the requirements.

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[1] These hypotheses and those in subsequent chapters were tested as null hypotheses.

[2] Cook, Walter W., et al. Minnesota Teacher Attitude Inventory, Form A (New York: Psychological Corporation, 1951).

It was designed to measure "those attitudes of a teacher which will predict how well he will get along with pupils in interpersonal relationships."[3] Although the instrument had been used extensively with elementary school teachers and secondary teachers in the academic subjects, few data were available for home economics teachers. There was a question at the time of choosing the inventory as to whether the content of the MTAI was appropriate for home economics, since the inventory had been developed and standardized with elementary school teachers; many items appeared to be oriented to a somewhat formally structured classroom situation in contrast to the informal class or laboratory commonly used by home economics teachers. The context in which the latter would respond was believed to have a considerable bearing on scores. For instance, "more freedom" to one accustomed to maintaining a rather formal classroom might seem to be desirable while the same term to one accustomed to a more permissive situation would connote a state of virtual anarchy. Further questions were raised when the relative position of home economics teachers and teachers of other subjects, both academic and "special," was examined. In this small group, nonvocational home conomics teachers were decidedly lower in scores than others and vocational home economics teachers next lowest!

In a subsequent study,[4] the question of the appropriateness of the MTAI for home economics teachers was examined briefly. Seventy-five items selected from the MTAI were incorporated into another inventory. The statements were chosen on the basis of responses by a group of teachers believed to be especially adept in maintaining a desirable classroom learning situation. The correlation between the resulting part-score and the MTAI was such (.90) that the use of the original instrument was believed to be justified.

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[3] Cook, Walter W., et al. The Minnesota Teacher Attitude Inventory Manual (New York: Psychological Corporation, 1951), p. 1.

[4] Ford, Roxana R. and Cyril J. Hoyt. The Identification and Measurement of Secondary School Homemaking Teachers' Attitudes and Other Characteristics Associated With Their Ability to Maintain Desirable Learning Situations (University of Minnesota, 1963).

Biographical data sheets were used to collect other relevant information. Separate forms were developed for use with freshmen, juniors, seniors, and teachers-in-service.[5] The form used for freshmen sought information in the following general categories: size of family, high school attended, years of home economics studied, size of home community, organizational affiliation, work experience, and source of school support. Junior and senior data sheets asked questions relating to marital status, sources of support funds, college experience, activities associated with children, and breadth of interests. The inservice teacher data sheet asked about the nature of the teachers' school responsibilities, size of classes, space and facilities of home economics instruction, amount and continuity of teaching experience, educational background, participation in inservice professional activities, marital and family status, personal interests, and feelings about the teaching load as well as about the relationships with those in supervisory positions.

Experienced Teacher Group

Teachers-in-service received the MTAI, data sheet, and covering letter of explanation through the mail. Students were contacted directly, either in classes or by individual appointment.

A stratified random sample of 1,939 homemaking instructors from 6 states comprised the experienced teacher group. In the selection of the sample, all of the home economics teachers in the specified state were listed. Deleted from the list were those (1) who were graduates of the class of 1954 of any of the cooperating institutions, (2) who held emergency teaching certificates, or

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[5] Copies of data sheets may be found in Appendix A, p. 141.

(3) who taught in a demonstration, laboratory, or trade school. Graduates of 1954 were to be used in a pilot study.[6] Those who held emergency certificates were considered atypical, and those teaching in a school other than a comprehensive high school were believed to be teaching in an atypical situation insofar as home economics is concerned. Remaining names were stratified on the basis of the number of faculty members employed in the school with which each was associated: that is, stratum 1, 15 or fewer; stratum 2, 16 to 75; and stratum 3, 76 or more full-time secondary school teachers. By use of a table of random numbers, 125 names were drawn from each stratum, a maximum figure since participating states differed in the number of teachers. In the event that any group had fewer than the specified number, all names were used. For this reason, all secondary school home economics teachers in one state were included.

Information was coded and transferred to IBM cards. Sums and means of designated groups were obtained. Throughout significance was determined by Chi square and analysis of variance as appropriate.[7] For the small numbers involved in the longitudinal study, the t-test was used.[8] An arbitrary level of significance was set: .01 level for support, the .05 level for weak support.

The MTAI means for the experienced teachers were categorized by state (Table 1). The range in the states was from 8.36 to 25.07 with the mean of the total 17.17. This reflects a difference in the six states (Illinois, Iowa, Michigan, Minnesota, Missouri and Ohio), which is statistically significant.

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[6] Information about the 1954 freshmen is presented in Appendix A, p. 155-156.

[7] Johnson, Palmer O. Statistical Method in Research (New York: Prentice-Hall, Inc., 1949).

[8] McNemar, Quinn. Psychological Statistics (New York: John Wiley & Sons, Inc., 1955).

Table 1: MTAI MEANS AND STANDARD DEVIATION OF EXPERIENCED HOME ECONOMICS TEACHERS

State	Responses	Mean	SD
I	329	25.07	37.64
II	349	20.82	38.43
III	330	18.10	35.06
IV	276	16.10	34.02
V	344	13.92	36.29
VI	311	8.36	37.10
Total	1,939	17.17	

Significant at the .01 level.

Since teachers are mobile, those employed in any given state may have been educated in a place far removed from the teaching locale. It was desirable to discover whether graduates of different institutions differed in attitudes toward children. The cooperating institutions involved land-grant colleges, land-grant universities, and teachers colleges.[9] In each state, however, there were teachers who were graduates of land-grant institutions (both colleges and universities) and of teachers colleges not in the study as well as graduates of institutes of technology, nonland-grant universities, and liberal art colleges (Table 2). The institutional MTAI means varied from 8.84 to 28.97 with cooperating institutions representing the highest and lowest scores. Differences among institutions were significant statistically; graduates of different institutions do differ in their attitudes toward children as these attitudes are measured by the MTAI.

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[9] At the time the study was initiated, a distinction was made between land-grant colleges and land-grant universities. The latter were those institutions in a state which served both the university and land-grant functions. The former served the land-grant function. In the interim, the colleges have been designated universities.

Table 2: MTAI MEAN SCORES OF TEACHERS FROM SIX STATES CLASSIFIED BY INSTITUTIONS FROM WHICH THE BACCALAUREATE DEGREE WAS RECEIVED

Institution	Number	Mean
A (cooperating institution)	136	28.97
E (" ")	93	22.72
C (" ")	57	22.68
F (" ")	178	21.74
D (" ")	16	18.12
Land-grant institutions not in study	199	17.70
Teachers colleges not in study	498	17.45
Institutes of technology	19	15.95
Universities, not land-grant	244	14.30
Liberal arts colleges	373	11.93
G (cooperating institution)	35	11.83
B (" ")	80	8.84

The hypothesis that differences would exist in attitudes toward children among teachers in schools of different size was supported since there is a difference significant at .01 level among the three groups (Table 3). In every state, teachers employed in the middle-sized schools with from 16 to 75 full-time secondary school teachers earned higher mean scores than did those in the other groups. Although teachers from the smallest sized schools tended to make the lowest scores, the difference between the mean scores of those in the smallest and those in the largest schools was not significant. This finding is not in complete agreement with results of a study of teachers in 26 states by Ford and Hoyt.[10] In that investigation size was determined by the population of the school district. Teachers employed in the smallest districts also earned the lowest MTAI scores, but those employed in cities of 100,000 or more scored highest. However, all of the teachers in the latter study were selected from reimbursed home economics departments.

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[10] Ford and Hoyt, Op. Cit., 54.

Table 3: MTAI MEANS OF TEACHERS EMPLOYED IN SCHOOLS OF DIFFERENT SIZE

State		Number of Secondary School Teachers Fewer than 16	 16 to 75	 More than 75
	N	110	112	107
I	MTAI mean	18.30	31.00	25.83
	N	122	117	110
II	MTAI mean	14.19	27.14	21.44
	N	115	116	99
III	MTAI mean	12.92	26.83	13.88
	N	120	121	103
V	MTAI mean	12.22	15.16	14.46
	N	102	108	101
VI	MTAI mean	8.98	11.03	4.88
	N	107	112	57
IV	MTAI mean	8.13	23.08	16.37
Total	MTAI mean	12.55	22.41	16.37

The mean scores of teachers in vocational, combination, and nonvocational programs did not differ significantly in four states but did in two. With the exception of one teacher in a combination group, the MTAI mean scores were higher for teachers in vocational programs, however, than for those in either of the other two categories. (Table 4).

That a person's feelings may be expressed differently when one believes herself to be overburdened and harassed with details than when one is serene seems obvious. But is the feeling about the teaching load associated with attitude toward children as reflected by the MTAI score? Approximately one-fifth of the respondents believed their teaching loads to be too heavy. In all states the MTAI mean scores were lower for such teachers than for those who felt that they had a satisfactory load, although the difference was significant in only one state (Table 5).

Table 4: MTAI MEAN SCORES OF TEACHERS IN VOCATIONAL, NONVOCATIONAL, AND COMBINATION TYPES OF HOME ECONOMICS DEPARTMENTS

		Type Department:		
State		Vocational	Nonvocational	Combination
	N	72	209	48
I	MTAI mean	32.32	22.64	24.77
	N	123	226	-
II*	MTAI mean	29.52	16.08	
	N	105	199	25
III*	MTAI mean	27.45	12.08	25.20
	N	139	137	-
IV	MTAI mean	20.47	11.48	
	N	166	137	41
V	MTAI mean	16.79	12.09	8.44
	N	74	235	1
VI	MTAI mean	9.84	7.65	27.00
Total	MTAI mean	22.39	13.82	19.06

*Significant at the .01 level

Table 5: MTAI MEAN SCORES RELATED TO TEACHING LOAD

State		Satisfactory	Too Heavy
	N	270	58
I	MTAI mean	25.39	23.98
	N	275	73
II	MTAI mean	22.50	13.93
	N	252	73
III	MTAI mean	19.38	14.11
	N	218	56
IV	MTAI mean	15.86	14.75
	N	274	69
V	MTAI mean	15.63	8.22
	N	235	72
VI*	MTAI mean	11.13	-0.64
Total	MTAI mean	15.63	8.22

*Significant (.05> P> .01)

In some schools the principal serves in a supervisory capacity. In many schools, home economics teachers also have supervision from both a local and a state supervisor (the latter may be known as a supervisor, coordinator, or itinerant teacher-trainer). In larger communities, they may have closer contact with the local supervisor but scarcely be aware of those associated with the state department of education. Likewise, teachers in very small nonvocational schools may have little contact with a supervisor. The work of those in supervisory capacities may be viewed by the supervised on a continuum from the provision of helpful assistance to meddling inspection. Is the way a teacher perceives the supervision given her related to her score on the MTAI?

The data concerning supervision by principals were analyzed using two categories as a result of the small number of responses to one statement. (Table 6) The first grouping, undesirable assistance, was composed of the responses as "leaves me alone" and "tells me what to do"; the second, desirable assistance, was composed of statements of positive help. There was no statistically significant difference between the means of the two groups although the mean scores made by those who saw supervision as helpful were uniformly higher.

There was a statistically significant difference in three states (II,III, IV) between the MTAI mean scores and the way in which assistance given by home economics supervisors, state or local, was viewed. (Table 7) A surprisingly large number of teachers were unaware of any supervision by a home economist. Although state policies with reference to supervisory help for teachers in different kinds of programs may be reflected by this response, the selection of the sample would appear to minimize the possibility that no supervision existed in fact. The question arises as to whether respondents recognized help given by personal letter, newsletter or comparable organ, or through state and local conferences as being supervisory aid. Some teachers may believe it necessary that the supervisor by physically present to give assistance.

Table 6: MTAI MEAN SCORES RELATED TO TEACHER ATTITUDE TOWARD SUPERVISION BY THE SCHOOL PRINCIPAL

State		Undesirable	Desirable
I	N	103	225
	MTAI mean	19.51	27.51
II	N	88	260
	MTAI mean	18.48	22.64
IV	N	67	204
	MTAI mean	14.54	16.24
V	N	96	247
	MTAI mean	10.82	15.26
III	N	90	238
	MTAI mean	10.02	21.05
VI	N	77	226
	MTAI mean	5.04	8.97
Total	MTAI mean	13.32	18.53

Table 7: MTAI MEAN SCORES RELATED TO ATTITUDES TOWARD SUPERVISION BY HOME ECONOMICS SUPERVISOR

State		Indicates how and what	Helps find way	Makes aware	Encourages assistance	Little or no help	No Supervisor
V	N	19	107	49	8	25	118
	MTAI mean	8.95	16.48	15.33	13.75	4.80	13.09
I	N	2	51	32	11	25	206
	MTAI mean	8.00	25.37	23.09	40.09	25.32	24.06
VI	N	16	54	52	3	13	159
	MTAI mean	6.63	3.19	11.77	8.33	4.77	11.21
IV*	N	15	84	55	20	11	85
	MTAI mean	3.80	17.35	24.82	27.80	2.18	11.72
II*	N	5	70	39	11	24	187
	MTAI mean	4.00	22.37	36.54	48.36	20.46	17.05
III*	N	2	49	30	8	10	214
	MTAI mean	27.50	10.06	33.27	28.38	28.30	17.32

*Significant at the .01 level.

The largest proportion of those who reported that they had supervision believed it to be of a positive or desirable nature. In each state, the statement, "helps me find ways to solve problems," reflected most frequently the contribution of the supervisor. In three states, those who reported that their supervisors encouraged them to assist on conference programs (appearing on panels, serving as discussion leaders, etc.) earned the highest MTAI mean scores. The converse was true in one state, although there were very few in that group.

The relationship between MTAI mean scores and recency of enrollment in college classes was explored. Respondents were asked to indicate the length of time which had elapsed since they had last engaged in formal study. A strong trend was observable for the higher attitude scores to be associated with recency of study. The difference was statistically significant in two states, I and IV. An aberration was noted in one state, IV, where teachers at the extreme of time lapse made similar scores. Only three teachers were in the 20-year grouping. (Table 8)

Table 8: MTAI MEAN SCORES RELATED TO YEARS ELAPSED SINCE EARNING COLLEGE CREDIT

State		Elapsed years:					
		Less than 1	1-2	3-4	5-9	10-19	20 or more
	N	106	74	41	47	42	19
I*	MTAI mean	37.96	19.51	26.66	17.91	15.00	11.37
	N	89	73	54	28	28	3
IV*	MTAI mean	25.97	13.22	11.68	9.00	6.04	25.67
	N	97	105	61	32	28	4
III	MTAI mean	23.31	17.68	17.18	14.50	10.96	9.50
	N	122	107	52	36	15	15
II	MTAI mean	20.06	28.36	20.52	10.69	14.40	9.53
	N	122	92	54	31	38	7
V	MTAI mean	19.38	11.70	11.87	13.58	3.58	21.57
	N	65	56	47	50	63	24
VI	MTAI mean	10.08	15.89	9.04	8.06	4.37	2.75

*Significant at the .01 level.

It seems reasonable that teachers whose scores indicate ability to establish rapport with youth might spend more time than others in activities involving children. However, MTAI scores showed no statistically significant differences in relation to time spent in such activities (Tables 9, 10, 11, 12). With the exception of State V, the lowest scores were made by those who spent no time in directing home experiences or in the home visits related to this work. In two states (I and III), those who spent least time in counseling had the lowest MTAI means and those who spent the most time, the highest. Significant differences were observed between MTAI scores made by teachers in two states (III and IV) who had study hall duty and those who did not with the latter having the higher means. Although not statistically significant, there is a discernible trend for higher mean scores to be associated with those activities with youth usually considered to be of an informal extra class nature insofar as a home economics program is concerned.

Table 9: MTAI MEAN SCORES RELATED TO TIME SPENT PER WEEK ON FHA OR NHA

State		Time per week: None	Less than one hour	One to two hours	More than two hours
	N	215	29	52	33
I	MTAI	21.12	32.24	29.73	37.18
	N	224	36	45	40
II	MTAI	18.53	25.94	20.31	31.22
	N	213	17	36	30
III	MTAI	15.68	24.06	25.78	23.30
	N	119	65	83	77
V	MTAI	13.13	19.66	10.99	13.13
	N	122	48	61	41
IV	MTAI	12.34	15.56	24.56	17.28
	N	149	33	54	46
VI	MTAI	5.50	15.61	6.94	14.59
Total	MTAI	15.28	20.84	18.65	20.91

Table 10: MTAI SCORES RELATED TO TIME SPENT IN HOME VISITS AND GUIDANCE OF HOME EXPERIENCES

State		Time per week: None	Less than one hour	One to two hours	More than two hours
	N	209	52	39	29
I	MTAI	20.32	35.33	28.56	36.22
	N	219	43	39	44
II	MTAI	17.38	15.44	33.72	33.00
	N	200	39	34	26
III	MTAI	15.15	20.00	24.44	34.00
	N	143	41	39	50
IV	MTAI	11.00	17.41	24.36	23.88
	N	169	65	64	45
V	MTAI	10.22	21.11	10.83	21.67
	N	175	32	29	37
VI	MTAI	5.63	11.28	11.45	16.51

Table 11: MTAI SCORES RELATED TO TIME SPENT IN COUNSELING ACTIVITIES, EXCLUDING HOME EXPERIENCES

State		Time per week: None	Less than one hour	One to two hours	More than two hours
	N	192	78	48	27
II	MTAI	20.26	22.79	24.79	14.07
	N	152	75	54	47
I	MTAI	18.35	30.08	28.42	34.23
	N	137	91	63	53
V	MTAI	10.90	14.32	12.84	12.34
	N	128	75	51	46
III	MTAI	10.41	21.44	26.61	27.57
	N	128	52	54	39
IV	MTAI	10.40	21.79	22.09	20.26
	N	118	69	47	42
VI	MTAI	4.87	13.70	6.70	17.24

Table 12: MTAI SCORES RELATED TO TIME SPENT IN STUDY HALLS

State		None	Less than one hour	One to two hours	More than two hours
		Time per week:			
	N	248	8	14	59
I	MTAI	24.53	53.75	20.71	24.51
	N	242	13	17	72
II	MTAI	23.52	33.54	14.82	11.24
	N	156	18	19	114
III	MTAI	22.86	14.83	11.90	15.00
	N	191	6	17	58
IV	MTAI	20.02	13.67	6.59	6.74
	N	200	16	14	114
V	MTAI	15.58	2.69	7.50	13.39
	N	153	25	23	79
VI	MTAI	7.15	13.56	3.65	10.40

In summary, there were statistically significant differences in the attitudes toward children shown by teachers in the several states, by graduates of the different institutions, and by teachers employed in school systems of different sizes. Further, although not of a magnitude to be called statistically significant at the level chosen (.01 level of confidence), a decided trend was evident that individuals with more accepting attitudes toward children were those who found their teaching loads satisfactory, who had recently enrolled in college-credit courses, who engaged in youth activities of a constructive nature, who taught in a vocational home economics department, and who saw supervision as helpful.

What do these findings suggest? First, in view of constant change, one may question whether the data reported are truly descriptive of the present condition. Each of us may find it beneficial to study and think further in reference to our own institution and state.

As our individual study progresses, this complex may be worthy of attention. If the MTAI is a reasonably good measure of attitude toward children (and there is evidence that it is), home economics teachers as a group appear to have a less accepting attitude than academic teachers. Is there something in our teacher education curriculums which foster this attitude? Are we more concerned with content to be learned than with the learner?

Further, there is evidence that teachers in the smallest sized schools and nonvocational departments are less accepting of children than are others. Does this suggest that administrators might well study placement practices with the aim of assigning the more "accepting" teachers to the grade level(s) at which home economics is required?

Since MTAI scores and attitude toward helpful supervision were related (either statistically or with a strong trend in some states), one might hypothesize that a general attitude of acceptance of others may be reflected. The question was not pursued in this aspect of the study. However, the finding suggests that state and local supervisors or others concerned with inservice education might well give attention to ways of involving teachers to an even greater extent in the planning and carrying on of institutes, conferences, or workshops.

The fact that large numbers of teachers were unaware of state supervisors suggests the need for their increased visibility. Clarification should be attempted at both preservice and inservice levels of the meaning of helpful supervision and the leadership responsibilities of state supervisors.

The Longitudinal Study

The longitudinal study included freshmen from the seven cooperating institutions and these same students as they became juniors in home economics education, seniors, and first-year teachers. For purposes of comparison, additional subjects were chosen and will be referred to from time to time. This section reports data from

... The entire home economics freshman class of 1954 of the seven cooperating schools (N=1,100)

... All freshmen in home economics of the class of 1955 for nine teachers colleges (N=226)

... That segment of the 1954 freshman class (for which data were available) of the cooperating institutions who completed college work and taught on year (N=68)

The great difference in the number of entering freshmen and the number at the end of one year of teaching reflects the dropout problem and the great number of career choices open to women with a degree in home economics. It reflects also the hazard in cooperative research--the inability of all original participants to complete the project. Complete data were available for only three institutions. Changes in staff, immediate problems of individual colleges, and state or institutional demands contributed to the difficulties.

Because of the small number (68), a decision was made with the advice of the statistical consultant to increase the sample size. This increase was accomplished by incorporating data for individuals who had transferred into the three institutions remaining in the study, completed college work, and taught one year. Thus, data were available for 68 freshmen, 85 seniors, and 90 first-year teachers (the latter figure results from those with odd classifications for the last year). This decision, while making analyses possible, limits the interpretations which can be made. Because findings from senior groups have implications for teacher education, they are included.

The following hypotheses were explored in the longitudinal phase: The freshman MTAI score will be related to

... degree of responsibility assumed with children before attending college

... experience with children as a baby sitter before attending college

... experience with children as care of brothers and sisters

... experience with children as playground supervisor before attending college

... experience with children as a club sponsor before attending college

... experience with children as a camp counselor before attending college

... experience as a teacher of young children before attending college

... membership in 4-H

... membership in Future Homemakers of America (FHA)

... years of home economics studied in high school

Senior[11] MTAI scores are related to

... experience as a baby sitter after entering college

... experience as a playground supervisor after entering college

... experience as a club sponsor after entering college

... experience as a teacher of young children after entering college

... experience as a camp counselor after entering college

... number of credits earned in college courses in child psychology

... number of credits earned in college courses in education

... number of college credits earned in courses in personal and family living

Inservice teacher MTAI scores are related to

... expressed attitude toward home economics conferences of less than one week

... expressed attitude toward home economics conferences of one week

... expressed attitude toward teaching load

... expressed attitude toward conferences with teachers of other subjects

... expressed attitude toward local faculty conferences

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[11] Preliminary analyses revealed no difference approaching significance between junior and senior scores, therefore, only the latter were used.

... expressed attitude toward professional improvement through college courses

... expressed attitude toward professional improvement through reading of a professional nature

The freshmen and senior hypotheses relate directly to activities in which many students have been encouraged to engage in order that they might understand children better and, hopefully, develop an accepting attitude toward them. The teacher activities selected are among those frequently recommended in the central states as a means of professional improvement. A previous study[12] suggested the existence of a relationship between teaching load and satisfaction.

Home Economics Freshmen, 1954

In the fall quarter of 1954, the home economics freshmen of the seven cooperating institutions responded to the MTAI and the freshman data sheet. Only first-quarter freshmen were included in the sample. This number was not limited to those with specific interest in home economics education but included students with interests in all areas of home economics, in all professional fields. The mean MTAI score for students in all institutions was 16.46. The mean for those in the land grant institutions was 15.86. Means in the land grant universities were higher than those in land grant colleges, 18.59 and 14.03, respectively, a difference significant at the .05 level of confidence. Differences significant at the .05 level of confidence were found also between MTAI means of students in the teachers colleges (24.39) and a combination of all land grant institutions. In this sample, freshmen who entered the teachers colleges made a higher mean score than did those who entered the land grant institutions and those who enrolled in land grant universities made higher mean scores than did those in land grant colleges.

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[12] Committee on Research and Publications. Factors Affecting the Satisfactions of Home Economics Teachers (Washington, D. C.: American Vocational Association, 1948).

Table 13: MTAI SCORES OF THE HOME ECONOMICS FRESHMEN OF SEVEN INSTITUTIONS: 1954

Institution	N	MTAI mean	SD
G	56	24.84	26.80
D	21	23.19	15.49
C	151	23.12	29.74
A	112	22.56	30.37
F	436	18.86	29.07
B	148	10.95	29.98
E	176	2.05	26.59
Total	1100	16.46	

Significant at .05 level.

Additional teachers colleges were asked to participate in 1955 because the number of freshmen enrolled in the original sample of that category was small. This group was of particular interest since it may be argued that students who enroll in an institution of this type may be highly motivated toward teaching as a profession and may reasonably be expected to have a more favorable attitude toward the MTAI than would a group containing a high proportion of students who were not interested in becoming teachers. However, it may also be argued that factors other than interest in teaching may influence choice of school; for example, nearness to home, lower tuition rates, or preference for a smaller campus. An examination of Tables 14 and 15 shows the mean and range among institutions. The mean of the cooperating institutions is somewhat higher than the teachers colleges with the range on the groups comparable.

Table 14: MTAI SCORES OF THE HOME ECONOMICS FRESHMEN IN SEVEN COOPERATING INSTITUTIONS: 1954

Institution	N	Mean
G	56	24.84
D	21	23.19
C	151	23.12
A	112	22.56
F	436	18.86
B	148	10.95
E	176	2.05
Total	1100	16.46

Table 15: MTAI SCORES OF FRESHMEN ENROLLED IN NINE TEACHERS COLLEGES

Institution	N	MTAI mean
5	22	26.68
1	56	24.84
8	28	24.14
6	21	23.19
7	16	18.69
9	17	18.24
2	27	11.93
4	9	10.78
3	30	10.40
Total	226	11.83

Measures of ability, ACE[13] or OSPE[14], were recorded for students when available. Correlations between those scores ranged from .02 to .33. Those for land grant institutions, with a single exception, were all significantly different from zero; that is, students with greater measured ability tended to score higher on attitudes toward children.

For the total freshman group, scores on the MTAI showed no statistically significant relationship with any item of the biographical data sheet.

Home Economics Education Seniors, Spring 1954

Seniors in spring 1954, responded to a biographical data sheet and to the MTAI. Information concerning ability as measured by the ACE or the OSPE and academic performance as measured by the grade point average was also obtained. Some institutions used a three point and others a four point base for calculating grade point averages. There was no standardized base. The students in the land grant universities scored highest on the MTAI (Table 16). Means for the students in teachers colleges and land grant colleges were not significantly different from each other. They were significantly lower than for the land grant universities. There was negligible correlation between scores on ability measures and attitude toward children. In only two institutions were honor point ratios and MTAI scores significantly related.

Graduating seniors of 1954 who entered the teaching field were retested after they had one semester of experience. The mean score for this group decreased from 55.50 to 30.04. The MTAI mean of those who graduated and taught was essentially the same as that of the entire group of seniors (See Tables 16 and 17). A test of differences between the means on the MTAI test and retest showed a significant difference in all institutions (Table 17).

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[13] American Council on Education Psychological Examination for College Freshmen (Washington, D. C.: American Council on Education).

[14] Ohio State Psychological Test (Columbus, Ohio: The Ohio State University).

Table 16: SCORES OF 251 SENIORS, HOME ECONOMICS EDUCATION, 1954

Institution	N	MTAI mean	SD	GPA mean	ACE or OSPE mean	r between MTAI and	
						ACE or OSPE	GPA
A	27	67.78**	21.67	1.70	114.25	.016	.336
B	47	63.19**	22.29	2.89	69.87	-.147	.007
C	28	62.57**	22.23	3.95	107.68	.018	.020
D	7	51.29	19.89	2.08	114.33	.446	.625
E	35	50.37	26.93	2.69	110.57	.008	.469*
F	81	50.28	25.70	2.68	109.01	.168	.344*
G	26	45.54	30.44	2.80	90.76	.243	.133
Total	251	55.50					

* Significant at .05 level.
**Significant at .01 level.

Table 17: MTAI SCORES OF SPRING SENIORS, 1954, BEFORE AND AFTER ONE SEMESTER OF TEACHING

Institution	N	Before Teaching MTAI mean	After Teaching MTAI mean	Difference
A	22	67.78	52.05	-15.73
B	27	63.19	42.22	-20.97
C	17	62.57	24.47	-38.10
D	7	51.29	31.43	-19.86
E	26	50.37	20.08	-30.29
F	60	50.28	28.77	-21.51
G	19	45.54	28.16	-17.38
Total	178	55.50	32.04	-23.46

Significant at .01 level.

Home Economics Education Seniors, 1954-55 Academic Year

An MTAI mean score of 53.44 was made by 290 graduating seniors in home economics education in the 7 cooperating institutions during 1954-55 (Table 18). An analysis of variance shows a difference significant at the .01 level among institutions. In only one institution was the relationship between attitude toward children and the measure of ability pronounced (Institution D). This, however, was based on such a small number, 11, that little credence can be given it. A somewhat greater relationship was shown between the attitude toward children and the honor point ratio in institutions B, C, and F.

Table 18: SCORES OF 290 SENIORS, HOME ECONOMICS EDUCATION, ACADEMIC YEAR, 1954-1955

						r between MTAI and	
Institution	N	MTAI mean	SD	HPR mean	ACE or OSPE mean	ACE or OSPE	HPR
A	43	72.47	23.84	1.65	112.03	-.14	.08
B	55	55.40	27.87	2.93	72.15	.27	.34
E	46	51.89	26.64	2.76	103.85	.21	.08
G	22	51.68	33.22	2.73	104.27	.07	-.08
C	30	49.60	29.04	3.89	102.05	.11	.36
F	83	47.42	23.04	2.75	116.90	.21	.22
D	11	35.09	19.55	1.68	68.82	.63	.45
Total	290	53.44					

The mean scores of 55.50 earned by seniors of 1954 and 53.44 of the 1954-55 academic year reflect the commonality of the two groups. In only one institution, D, in which a small number of students were involved was there a decided difference. In neither year was there a significant relationship between the measures of intellectual ability and attitude toward children.

An examination of the MTAI scores of 1954 freshmen and seniors (Tables 14 and 16) may be useful. These represent two distinct groups, the first including students of various subject matter and professional interests in home economics and the second, those majoring in home economics education. The difference in the means suggests that there may indeed be greater diversity among students in relation to the attitude in question than might have been anticipated.

Findings From Three Institutions in Longitudinal Study

The mean MTAI scores of subjects from each of the three institutions showed a gain between the freshman and senior years (Table 19) and, in each instance, a drop in score was shown for first-year teachers.

Table 19: COMPARISON OF MTAI MEAN SCORES BY LEVEL AND RANGE: THREE INSTITUTIONS

Level		Institution		
		A	B	F
Freshman	N	11	21	36
	Range	15-84	68-86	50-7
	MTAI mean	37.75	14.05	11.28
Senior	N	10	21	54
	Range	20-80	2-107	15-107
	MTAI mean	45.70	49.76	67.26
First-Year Teacher	N	12	21	57
	Range	50-89	39-77	62-95
	MTAI mean	18.17	9.33	27.21

Of the ten relationships explored at the freshman level, only two were of statistical significance: experience as a baby sitter prior to entering college and membership in the Future Homemakers of America (Tables 20,21). An examination of the mean scores indicates a difference in favor of those with extensive experience in baby sitting. No cause and effect relationship may be assumed. Whether the activity resulted in increased accpetance of children as measured by the MTAI or whether the activity was pursued because of an existing liking for and acceptance of them is not known.

Table 20: FRESHMAN MTAI MEAN SCORES AS RELATED TO EXPERIENCE AS BABY SITTER PRIOR TO ENTERING COLLEGE: THREE INSTITUTIONS

	Little Experience		Extensive Experience	
Institution	N	Mean	N	Mean
A	4	35.25	7	39.15
B	13	7.07	8	26.00
F	20	-2.13	15	23.66
All Institutions	37	7.29	30	28.20

Significant at .01 level.

Table 21: FRESHMAN MTAI MEAN SCORE AS RELATED TO MEMBERSHIP IN THE FUTURE HOMEMAKERS OF AMERICA: THREE INSTITUTIONS

	Membership in FHA			
	None		One year or more	
Institution	N	Mean	N	Mean
A	9	37.55	2	16.50
B	15	18.90	6	9.92
F	22	17.04	14	2.21
All Institutions	46	22.85	22	2.80

Significant at the .01 level of confidence.

In each institution, these freshmen with no experience with the Future Homemakers earned higher mean scores than did those with one or more years of membership. Approximately one-third of the group had taken part in FHA work. Whether the others had chosen not to participate or whether the organization was not available to them in their communities is not known. Again, cause and effect may not be inferred from the data. One may, however, raise questions as to whether those who engaged in FHA activities may have become more accepting, as reflected by scores on the instrument used, than they would otherwise have been. A study by Pinkerton[15] of students in selected California schools indicated that those girls enrolled in home economics classes made greater progress on certain attitudinal measures than did nonenrollees, although the latter made consistently higher scores on the inventories administered.

Of the eight relationships explored at the senior level, only one was of statistical significance: experience as a camp counselor (Table 22). This also was a negative relationship. In each institution, those with some experience as a camp counselor earned lower MTAI mean scores than did those with no experience. There is no evidence that these--or the other--experiences were planned for in terms of learning to know and appreciate children. Indeed, some of the activities might well have been pursued solely for the purpose of satisfying curricular requirements, the others as a means of gainful employment. Despite the fact that no cause and effect relationship may be assumed, these data serve to remind the educator that mere participation in an activity does not necessarily result in a positive relationship to the learning sought.

Of the seven relationships explored with reference to experienced teachers, none approached significance.

Positive statements based on findings from the very small number remaining in the longitudinal study cannot be made. Not all responses were complete. The inclusion of transfer students further decreases confidence in findings. Nevertheless, there are certain findings which warrant careful consideration and which give direction to home economics teachers in secondary and higher education, city and state supervisors, and administrators.

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[15] Pinkerton, Jean Fackler. Relation Between Ninth-Grade Home Economics Instruction and Change in Pupils' Attitudes Toward Family Relationships, Unpublished doctoral thesis (University of Minnesota, 1962).

Table 22: SENIOR MTAI MEAN SCORES RELATED TO EXPERIENCE WITH CHILDREN AS A CAMP COUNSELOR IN THREE INSTITUTIONS

Institution	Little Experience		Extensive Experience	
	N	Mean	N	Mean
A	8	48.38	2	35.00
B	10	66.50	11	35.36
F	38	72.18	16	62.08
All institutions	56	57.75	29	45.10

Significant at .05 level.

The most obvious finding, perhaps, is the necessity for recruitment. The loss in numbers between entry and graduation, as well as the competition for home economics education graduates by employers who do not expect to assign them to work in a teaching capacity, make necessary a larger pool of able undergraduate students.

The failure to find a discernable relationship between MTAI scores and a variety of experiences believed to be important in sensitizing students to children suggests that teacher educators, with help of administrators, might well examine the conditions under which the supposed learnings take place. Are many of these simply activities rather than learning experiences? Do courses required of the prospective teacher, especially those relating to children (child psychology or development, family relationships, marriage and the family, and the like) actually have the objective assumed? Is there a common understanding of course objectives on the part of the curriculum makers, the current instructor, and the students? Are the teaching procedures consistent with the objective? Or are we expecting certain kinds of learning from courses which are not intended by the department concerned? Are we, at the precollegiate, collegiate, and postcollegiate levels helping prospective teachers and teachers in service to see the learning possibilities inherent in the out-of-class activities in which they may engage?

Sub-studies

As the investigation progressed, certain findings precipitated sub-studies. Only a few of the more extensive will be reported here.

Change in MTAI Means

One such study resulted from the evidence of great variation in the MTAI means of seniors and of these seniors as first-year teachers. Two senior samples were tested both as seniors and as first-year teachers. An examination of the score changes for the two test periods showed a general drop in score with some differences as much as 100 points. A further study was made of those whose scores had changed as much as 50 points during the period from graduating senior to one semester of teaching experience to explore possible relationships to the teaching situation. Each was asked to retake the MTAI and to respond to the experienced-teacher questionnaire which elicited descriptive and judgmental information.

In the senior sample (541) 48, or 8.9 per cent, had a score change of 50 or more points. Of the 48, one showed an increase while 47 decreased in MTAI score. The latter had mean scores of 65.33 as seniors, 3.50 as first-year teachers, and 4.22 on the retest. One questions whether the student teaching situation had prepared the prospective teacher adequately for the subsequent teaching experience.

Nearly two-thirds of the group were employed in towns of 5,000 or fewer, none in large cities. It is, therefore, not surprising that classes were smaller than average with over two-thirds having 20 or fewer per class and none more than 30. Equal numbers considered this load to be satisfactory (49 per cent) and too heavy (49 per cent). The majority, 85 per cent, were teaching only home economics with four-fifths having classes at both junior and senior high school levels. Over three-fourths (77 per cent) preferred this age level, although preference was expressed by 9 per cent for working with older (18 years and up) and only by 14 per cent for younger (under 12 years) students. However, despite these figures, more than two-thirds wanted a change (Table 23).

Table 23: RETEST GROUP: CHANGE DESIRED IN TEACHING LEVEL

Direction of Change	N	Per Cent
Higher than now teaching	13	27
Lower than now teaching	20	43
None	14	30

A previous study[16] showed satsifaction on the job to be related to the teachers' assessment of the adequacy of facilities for instruction. Almost half of the retested group reported space and facilities adequate for all or part of the program.

Communities were judged to be deficient in cultural aspects. Few had art collections, museums, musical groups or concerts and less than half had libraries. Most teachers believed that opportunities for participation in social organizations were open to them. Recreational opportunities were rated as fair by half the teachers with equal numbers of the rest giving poor and excellent ratings. A surprisingly large proportion expressed satisfaction with living conditions (47 per cent) although a fourth considered them to be undesirable.

Most of the sample (88 per cent) indicated that there was a pleasant relationship existing among co-workers although considerably fewer (68 per cent) saw this as a cooperative one. A small proportion (11 per cent) believed the school atmosphere to be cold and impersonal. Only a few reported any restriction of the teachers private life by administrators; however, just over a fourth believed the community attitude to be restrictive.

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[16] Committee on Research and Publications. Factors Affecting the Satisfactions of Home Economics Teachers (Washington, D. C.: American Vocational Association, 1948).

Responses relating to supervision were inconsistent. Thirty-six per cent reported that supervisors left them strictly alone. But in a subsequent item, two-thirds indicated that supervisors helped them work out problems and an additional 21 per cent reported that the supervisors gave them help equally in the form of directions and suggestions.

Despite the decrease in MTAI mean scores, 30 per cent expressed the belief that teaching was either the best or by far the best of the professions.

Years of Experience of Inservice Teachers[17]

Considerable interest was shown regarding the effect of age of teachers on the results of the inservice teacher study. The teachers who had 20 or more years of home economics teaching experience composed almost one-fourth (22 per cent) of the total inservice teacher sample and had the lowest MTAI mean.

Fourteen items on the teacher data sheet were selected for further analysis. Those items were compared by state and by length of teaching experience. Teaching experience was analyzed in three categories: less than 5 years, 5 to less than 20 years, and 20 years or more. The MTAI means decreased significantly with increased experience (Table 24).

The length of teaching experience was significantly related by MTAI means to the sex of pupils in their classes but not to the breadth of the teaching program. Those teachers of 20 or more years of experience who were teaching only home economics classes to girls had a significantly lower MTAI mean than others (Table 25). Since 65 per cent of the teachers (69 per cent of the most experienced group) taught only home economics to girls, this figure becomes more meaningful. The small number who taught both home economics and some other subject to girls only had a higher MTAI mean.

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[17] Detailed tables appear in Appendix A, p. 159-163.

Table 24: YEARS OF EXPERIENCE RELATED TO THE MTAI SCORES

Years of Experience	N	Per Cent	MTAI mean	SD
0-4	670	35	19.66	35.79
5-19	837	43	18.49	36.64
20 or more	429	22	11.45	39.29
Total	1936		17.17	

*Significant at the .01 level.

Table 25: MTAI MEANS, YEARS OF EXPERIENCE, TEACHING ASSIGNMENT, AND COMPOSITION OF CLASSES

	Home Economics and Other Classes for						Home Economics Only for					
	Boys and Girls			Girls Only			Boys and Girls			Girls Only		
Years of Experience	N	%	Mean	N	%	Mean	N	%	Mean	N	%	Mean
0-4	136	19	11.59	45	7	19.16*	56	8	24.52	434	66	21.99*
5-19	201	23	16.32	44	5	10.02*	85	10	17.66	504	62	19.28*
20-over	59	13	10.47	12	3	31.33*	61	15	23.77	296	69	8.11*

*Significant at the .01 level.

The MTAI means were significantly different among the experience groups only when enrollments were above 100. As shown in Table 26, those with 20 or more years of experience had significantly lower MTAI mean scores than others.

Teachers in the junior high schools made lower mean scores than did those in senior high school or combination programs. Among the teachers at the junior high school level, those with 20 or more years of experience had a significantly lower MTAI mean than did other exprience groups (Table 27).

Table 26: TOTAL ENROLLMENT RELATED TO LENGTH OF TEACHING EXPERIENCE AND MTAI

	Combined Enrollment of:											
	49 or less			50-74			75-99			100 or more		
Years of Experience	N	%	MTAI mean	N	%	MTAI mean	N	%	MTAI mean	N	%	MTAI mean
0-4	150	20	12.82	147	22	20.74	165	27	25.63	206	30	19.77*
5-19	164	18	12.18	167	20	14.66	179	23	24.13	322	38	19.64*
20-more	45	11	10.98	63	15	15.08	93	22	17.00	223	51	8.29*

*Significant at the .01 level.

Table 27: LEVEL OF HOME ECONOMICS CLASSES RELATED TO LENGTH OF TEACHING EXPERIENCE AND MTAI

	Junior High			Senior High			Both		
Years of Experience	N	%	MTAI mean	N	%	MTAI mean	N	%	MTAI mean
0-4	111	17	21.15*	278	37	19.10	275	45	19.01
5-19	184	21	20.29*	360	39	19.16	283	38	15.36
20-more	103	24	1.99*	205	47	13.88	115	27	15.72

*Significant at the .01 level.

Amount of teaching experience was significantly related to the teacher's judgment as to the adequacy of space and facilities in the home economics department (Table 28).

Table 28: ADEQUACY OF SPACE AND FACILITIES IN HOME ECONOMICS DEPARTMENT RELATED TO LENGTH OF TEACHING EXPERIENCE AND MTAI

	Adequate for all phases			Adequate for some phases			Inadequate but plans			Inadequate: no plans		
Years of Experience	N	%	Mean	N	%	Mean	N	%	Mean	N	%	Mean
0-4	212	31	24.40*	255	37	16.64*	160	25	18.21	40	6	24.70
5-19	294	35	19.82*	258	30	18.99*	218	27	15.54	62	7	12.61
20-more	178	41	12.04*	108	25	8.31*	108	26	13.29	34	8	13.59

*Significant at the .01 level.

Assessment of the nature of supervisory assistance was studied (Tables 29,30). Because of its low frequency, the first response, "tells me what to do", was not analyzed. The MTAI for the three experience groups were not significantly related to assistance from the principal except when the teachers reported that the principal left them alone. In the latter case, the teachers who had taught 20 or more years received a significantly lower MTAI mean than did others.

Table 29: ASSISTANCE FROM MY PRINCIPAL AS RELATED TO LENGTH OF TEACHING EXPERIENCE AND MTAI

	Helps me with Problems			Leaves me Alone			Suggestions When I Ask		
Years of Experience	N	%	MTAI mean	N	%	MTAI mean	N	%	MTAI mean
0-4	114	17	22.32	155	24	18.61*	394	58	19.86
5-19	169	20	21.09	216	26	13.84*	437	52	18.31
20-more	60	14	18.50	137	32	5.51*	224	52	12.86

*Significant at the .01 level.

Over half of the teachers reported that they did not have a home economics supervisor. Since 35 per cent were vocational teachers and since in some states all teachers, whether in vocational or nonvocational departments, are given the benefit of supervisory help, it is probable that this question was misinterpreted. It was believed to be appropriate, therefore, for two categories to be combined: "do not work under supervisor", "gives little or no help".

The mean for the most experienced teachers who indicated that the supervisor helped them find ways to solve problems they presented themselves was significantly lower than that of other teachers who reported the same attitude (Table 30). For each experience group, the highest MTAI mean was obtained by teachers who believed that the supervisor provided democratic guidance and the lowest by teachers who characterized the supervisor as indicating "how and what she thinks I should do".

Table 30: ASSISTANCE FROM HOME ECONOMICS SUPERVISOR RELATED TO LENGTH OF TEACHING EXPERIENCE AND MTAI

	Indicates How and What			Helps See Ways to Solve Problems			Makes Me Aware of Problems			Encourages Responsibility on Programs			Little or No Help		
Years of Experience	N	%	MTAI mean	N	%	MTAI mean	N	%	MTAI mean	N	%	MTAI mean	N	%	MTAI mean
0-4	25	4	4.88	154	21	19.99*	91	12	24.11	5	1	30.00	372	58	20.49
5-19	27	3	6.78	166	19	21.16*	98	11	27.10	39	5	24.90	479	59	14.92
20-more	7	2	-4.43	93	22	1.29*	68	15	15.29	19	5	33.00	224	51	13.25

*Significant at the .01 level.

The credits earned beyond the bachelor's degree seemed to be more closely related to performance on the MTAI by the three teaching experience groups than did some of the other items analyzed (Table 31).

Table 31: CREDITS EARNED BEYOND THE BACHELOR'S DEGREE RELATED TO LENGTH OF TEACHING EXPERIENCE AND MTAI

	None			Less Than Masters			Masters or Equivalent			More Than Masters		
Years of Experience	N	%	MTAI mean	N	%	MTAI mean	N	%	MTAI mean	N	%	MTAI mean
0-4	391	60	17.92*	264	38	23.31*	9	1	6.33	5	1	23.60*
5-19	152	18	10.03*	468	58	16.36*	111	12	23.95	102	12	30.90*
20-more	24	6	2.25*	193	45	7.29*	84	19	13.63	127	30	18.04*

*Significant at the .05 level.

Except for those teachers with the masters degree or equivalent, the means of the teachers in the most experienced group were the lowest. The MTAI means increased with increased credits for the two most experienced groups; however, the mean of the least experienced group was lowest at this level of education.

For single teachers only did the MTAI relate significantly to the amount of teaching experience (Table 32). The means decreased with increased experience.

Table 32: MARITAL STATUS RELATED TO LENGTH OF TEACHING EXPERIENCE AND MTAI

Years of Experience	Single			Married			Widowed or Divorced		
	N	Per Cent	MTAI mean	N	Per Cent	MTAI mean	N	Per Cent	MTAI mean
0-4	335	50	23.45*	308	46	15.70	27	4	29.12
5-19	259	31	18.15*	477	57	16.80	100	12	22.88
20-more	296	69	11.09*	94	22	14.27	39	9	7.40

*Significant at the .01 level.

Fourteen items in the inservice teacher data sheet were related to the amount of time spent on nonclass activities during the past week (Table 33). A total score of 14 indicated that a teacher might have spent one hour on each of the 14 activities during the previous week. The total score for these items was obtained for 3 time categories: 0-10, little time; 11-17, considerable time; 18 or more, a great deal of time.

Table 33: TIME SPENT ON NONCLASS ACTIVITIES DURING PREVIOUS WEEK RELATED TO LENGTH OF TEACHING EXPERIENCE AND MTAI

Years of Experience	Little			Considerable			Great Deal		
	N	Per Cent	MTAI mean	N	Per Cent	MTAI mean	N	Per Cent	MTAI mean
0-4	163	24	18.91*	306	46	20.19*	201	30	19.64
5-19	208	25	15.60*	382	45	20.42*	246	29	18.21
20-more	147	34	8.10*	176	41	12.46*	106	25	18.18

*Significant at the .01 level.

MTAI means were not significantly different among the experience groups for those who spent a great deal of time on nonclass activities. They were, however, significantly different among experience groups for the other two categories of "little" and "considerable" time spent. In each of the categories, the teacher with 20 or more years of experience had the lowest MTAI mean.

Length of teaching experience was significantly related to the MTAI mean for teachers who had attended conferences or institutes for home economics teachers but not if they had shared on the program (Tables 34, 35). The MTAI means for those who attended decreased with increased experience. The MTAI means for those who shared on the program were higher than the rest of the groups regardless of experience. Only if they had had no experience with workshops for home economics teachers, did teachers who had taught 20 or more years receive a significantly lower MTAI mean than the other experience groups. Again, the highest MTAI mean for each experience group occurs in the category "shared on the program".

Table 34: EXPERIENCE WITH CONFERENCES OR INSTITUTES FOR HOME ECONOMICS TEACHERS RELATED TO LENGTH OF TEACHING EXPERIENCE AND MTAI

	No Opportunity			Attended			Shared on Program		
Years of Experience	N	Per Cent	MTAI mean	N	Per Cent	MTAI mean	N	Per Cent	MTAI mean
0-4	188	27	16.98	374	55	20.29*	84	13	25.76
5-19	174	20	17.00	472	56	16.48*	146	18	27.23
20-more	81	19	10.05	248	57	10.11*	70	17	25.40

*Significant at the .01 level.

Table 35: EXPERIENCES WITH WORKSHOPS FOR HOME ECONOMICS TEACHERS RELATED TO LENGTH OF TEACHING EXPERIENCE AND MTAI

	No Opportunity			Attended			Shared on Program		
Years of Experience	N	Per Cent	MTAI mean	N	Per Cent	MTAI mean	N	Per Cent	MTAI mean
0-4	537	78	18.45*	72	11	28.54	31	5	30.00
5-19	638	73	18.42*	105	14	16.06	44	6	22.66
20-more	299	68	11.18*	66	17	14.64	30	7	21.57

*Significant at the .01 level.

Similarly, MTAI means were significantly lower for the most experienced group of teachers among those who had no opportunity for experiences with conferences or institutes for teachers in several fields (Table 36).

Table 36: EXPERIENCE WITH CONFERENCES OR INSTITUTES FOR TEACHERS IN SEVERAL FIELDS RELATED TO LENGTH OF TEACHING EXPERIENCE AND MTAI

	No Opportunity			Attended			Shared on Program		
Years of Experience	N	Per Cent	MTAI mean	N	Per Cent	MTAI mean	N	Per Cent	MTAI mean
0-4	183	27	14.71*	415	61	21.41	41	6	32.39
5-19	200	24	21.16*	514	61	16.41	73	9	25.29
20-more	133	31	5.68*	225	52	14.57	40	9	23.60

*Significant at the .01 level.

The teachers of all experience groups who received their highest MTAI means were those who shared on the program. Comparatively few had this privilege. Teachers of all experience levels received their highest means when they shared on programs for conferences or institutes for their local school faculty. For the other two categories the MTAI means for the teachers with 20 or more years of experience were significantly lower than the other teachers in the same categories (Table 37).

Table 37: EXPERIENCES WITH CONFERENCES OR INSTITUTES FOR YOUR LOCAL SCHOOL FACULTY RELATED TO LENGTH OF TEACHING EXPERIENCE AND MTAI

	No Opportunity			Attended			Shared on Program		
Years of Experience	N	Per Cent	MTAI mean	N	Per Cent	MTAI mean	N	Per Cent	MTAI mean
0-4	174	26	17.27*	364	54	19.49*	102	15	27.76
5-19	167	20	18.90*	452	53	15.37*	170	21	26.74
20-more	92	22	7.59*	216	50	9.02*	91	21	25.09

*Significant at the .01 level.

In summary, teachers with 20 or more years of experience had lower MTAI means than did those in other experience groupings on the majority of items with many of the differences statistically significant. If the MTAI does measure what it purports to measure, this finding is indeed a matter of concern.

City and state supervisors of home economics, as well as administrators of school systems, may appropriately direct attention to this situation. With the least accepting teachers, as reflected by the MTAI mean scores, teaching at the junior high school level--a difficult period for many children--what is the result in terms of pupil development and learning? Satisfaction with school? Enrollment in subsequent work in home economics? Is the lack of acceptance of children associated with a lack of acceptance of others, regardless of age? With a changing self-concept?

The older teacher has many excellent contributions to make. She is essential to the continuance of the homemaking program in the secondary school. It is imperative that ways be found to help her become an even more effective worker.

The Ohio Study[18]

The report on MTAI scores of the large number of home economics teachers in the six states of the study was surprising in some ways. Particularly disappointing to Ohio were its low mean scores in comparison with those of other states. Hence, an attempt was made to explore some possible reasons for these findings. The 311 Ohio teachers who had participated in the 1954-55 study were sent a one-sheet questionnaire concerning their status of the previous year. Of this number, 255 (or 82 per cent) participated. (See Table XIX)[19]

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[18] Contributed by Ruth T. Lehman, Professor, Home Economics Education, The Ohio State University, Columbus.

[19] All tables for this study are in Appendix B, p. 173-181.

Five main questions were studied for this group:

1. Were many of the Ohio teachers persons who should not have been drawn in the first place? (Ohio was the one state permitting minors in the field to teach, and these were supposed to be eliminated.)
2. Were a high proportion of the teachers old? (On the assumption that age might be a reason for less acceptance of the child in the schoolroom situation, and/or for less acceptance of the educational philosophy represented in the MTAI.)
3. Had a high proportion of teachers not taught continuously since graduation, and did this make a difference in scores? (On the assumption that lack of contact with the schools might make them less acceptant of children as found then in the classroom.)
4. Were there factors in the school situation itself which might tend to make the teacher a less acceptant person? The following factors were studied:
    a. Discipline a problem
    b. Attitude of school faculty and administration toward home economics
    c. Teacher's estimate of mental ability of her pupils
    d. Teacher's attitude toward working with young people
    e. Type of homes from which most of the pupils come
5. Were a high proportion of the schools which were drawn located in cities? (On the assumption that city teachers in a highly industrialized state such as Ohio might be less acceptant persons on the MTAI because of their heterogeneous group of pupils.)

The first question was quickly disposed of. Only six teachers had a temporary certificate and so should not have been drawn; only two were found not be home economics majors. Therefore, the group drawn was not biased in these respects.

The second question of age was checked in relation to the year a bachelor's degree (or certificate) was received. Date of master's degree--if held--was disregarded. That the group had a high proportion of older teachers is evident in Table XX (Of 245 teachers for whom there were data on this point, 117 [or 48 per cent] had been out of school for 20 or more years). Only 15.5 per cent had graduated less than five years earlier.

Was age related to scores on the MTAI? In Table XXI, mean scores are given at five-year intervals--with the exception of the oldest group who had been out 20 years or longer--and for each of three school sizes. No consistent pattern is evident. However, when data are grouped at ten-year intervals, as in Table XXII, we discover a regular drop in scores by these intervals for faculty in the smallest and largest schools, and in the total group as well. The middle schools--with the wide range of 16 to 75 teachers--shows little difference in scores at these experience levels. It is of interest, too, to see that in general the mean score by size of school is highest for the small school, lower in the middle school, and lowest in the very large school. This is true for the periods of less than 10 years and 10-19 year groups; the progression fails with the middle schools at the period of 20 years or over.

In general, we can say that the oldest teachers scored lowest on the MTAI. Since Ohio had almost half (48 per cent) of its teachers in this oldest group, this factor may well have been important in the low mean scores found for that state. This factor of age also might result in less acceptance of the educational philosophy represented in the MTAI.

The third question asked whether or not having taught continuously since graduation made a difference in MTAI scores. According to data given in Table XXIII, it did in the case of teachers in the small school. Those who had not taught continuously made a much lower score.

The fourth question dealt with certain factors in the school situation which might influence a teacher's attitude scores. Relevant data are given in Table XXIV:

a. It is evident in the table that those teachers who said discipline was difficult for them or often a problem made low scores on the MTAI, no matter what the size of the school. However, the number of teachers who admitted this problem was small. On the other hand, teachers in large systems who said discipline was not a problem with them also made low scores. Could this be due to the type of discipline they enforced?

b. It is also evident in Table XXIV that teachers who said that the attitude of administration and other faculty members toward home economics was favorable were much more likely to have higher scores than those who said the attitude was neutral. The picture for the "unfavorable" group is based on so few cases, it is not relevant.

c. For the group as a whole, mean scores of teachers varied directly with the extent to which they said their students were of high mental ability. Teachers from both the small and large schools had low means if they believed their pupils were low in ability.

d. Finally, the teacher's own attitude toward working with young people would seem to bear some relationship to MTAI scores. Although there were few who indicated either a neutral or antagonistic attitude, these attitudes were associated with low scores (except in the case of neutral for small schools).

In Table XXV, it is clear that pupils in the small schools were largely from farm and rural nonfarm, middle-class homes, with a smaller number classified as lower class. Pupils from the other extreme--large schools--on the other hand, were from urban and suburban homes and largely middle class. However, there was a significant number from lower class, Negro, and foreign families, with some also from upper class and Jewish homes. The middle group of schools (16-75 teachers) again shows its lack of homogeneity through the types of homes represented. All types of homes reported for the small schools and the very large ones (with the exception of Jewish) are also reported. It is true that urban and suburban and middle-class homes stand out. But farm and and rural nonfarm and lower class are represented in significant numbers; foreign, Negro, and upper class are also found. One would expect such differences in school population to be associated with scores on attitude toward children and youth.

That this association does exist is suggested by the MTAI mean scores of the teachers and were reported above. (See Table XXVI.) However, the striking thing about these scores is that they vary indirectly with size of school. Invariably, the scores of teachers in the large schools are the lowest, those of the middle schools next, and when scores are given for teachers in the small schools, they stand highest. Is this because more of the groups exist together in the large schools? The classes more complex and crowded?

The final question considered in the sub-study of Ohio teachers was whether, in the original sample of 311 teachers:

1. a higher proportion of teachers from very large cities in the top group (76 and more faculty) might have been drawn than was probable in at least some of the other states.
2. an undue proportion of teachers from larger schools might have been drawn in the middle group (16-75 teachers).

Data in Table XXVII suggests that the first point was definitely possible. In 1950, Ohio had more cities over 100,000 in population than any of the other states. Ohio and Michigan had about the same number in the 50,000 range, as did Illinois when cities in Cook County are omitted. This omission was also made in drawing the Illinois sample. Illinois, Michigan, and Ohio had a similar pool of cities of 25,000 and over. Iowa, Minnesota, and Missouri had a much less urban population than the other states from which to draw their teacher sample.

In other words, Ohio had a larger pool of cities on which to draw and, as shown in Table XXVIII, drew two-thirds of its large school sample (76 and more faculty) from cities over 100,000 in population. It is doubtful if any other state had this record with its attendant problems.

The second point--that an undue proportion of teachers from larger schools might have been drawn in securing the sample of schools ranging from 16 to 75 teachers--is not supported by the data in Table XXVIII. Instead, over half of the cases were drawn from school communities of less than 10,000; a fourth, from 10,000 up to 25,000; and the rest, 25,000 and over. The fact that very large cities appear at all in this group is due to the presence of county or exempted village districts which had these cities as their post office address.

A breakdown for the middle schools in Table XXIII by actual number of faculty in the schools studied shows the sample definitely skewed in the direction of small schools. (See Table XXIX). On the other hand, the sample is as clearly skewed in the direction of city districts (Table XXX). Again the city assumes importance in Ohio's sample.

Conclusions

Three factors stand out in this sub-study, which might well account for differences in Ohio scores and those in the other five states. These are: teacher's age, proportion of cities in the sample, and composition of the student body in schools of varying size.

First, the sample of teachers drawn had a higher proportion of older teachers in it than would normally be expected in a teacher population: 48 per cent had been out of college 20 or more years. Age made a difference in scores; mean scores of these older teachers were in general lower than for teachers who had finished less than 10, or 10-19 years earlier. Those in the largest schools had the lowest mean.

Second, Ohio had a larger pool of very large cities (eight) from which to draw its sample than did the other states. In its random sampling of the largest school systems, it drew two-thirds of its number from these eight cities. Accordingly, its sample of the largest systems was biased in the direction of the very large city. Even the schools of the middle group of teachers were city-oriented.

Third, the student groups--in the three classifications of school by size--varied greatly in composition. Small schools represented the most homogeneous pupil population; very large schools, the most heterogeneous--not what is often considered the "typical American school". The middle-sized school, while having as many groups represented, had the problem groups in smaller number, and doubtless as a result had fewer problem schools.

The Iowa Study[20]

Would a relationship exist between scores on the MTAI and the reaching section of the JHEII? To answer, a sample composed of 93 home economics education majors at Iowa State University, approximately all of the seniors of 1954, was studied. The data were collected, after the students had completed their student teaching, by administering the Minnesota Teacher Attitude Inventory, the Johnson Home Economics Interest Inventory, and a data sheet to determine relationships of the MTAI and JHEII scores and certain other factors.

The correlation between the scores of the two inventories was .16 which is not significant at the five per cent level of confidence. When the scores on the MTAI were analyzed in relation to whether the students had taken home economics in high school or whether these courses were required or elective, the variance was not significant at the five per cent level. Likewise, the amount of 4-H Club experience which students had and the extent to which they had not when there was an opportunity revealed no significant relationship to MTAI scores.

The Minnesota Study

During 1954-55 each full-time home economics teacher in a secondary school program was asked to complete the MTAI and a data sheet designed for teachers in service. Of the 653 persons contacted, 617 (94 per cent) responded. Five hundred and seventy responses were complete and useable. Vocational teachers comprised 40 per cent of the total group. Those who chose not to take part were distributed among the three school-sized strata as follows: from large schools (with 75 or more secondary school teachers), 39 per cent; from medium-sized schools (16 to 75 secondary school teachers), 33 per cent; from small schools (with fewer than 16 teachers in the secondary school), 28 per cent. Two-thirds of the nonparticipants were in nonvocational programs. The distribution of respondents is shown in Table 38.

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[20] Abstract of unpublished M. S. Thesis of Gladys M. Grabe, Iowa State University, Ames, Iowa.

Table 38: COMPARISON BY SCHOOL SIZE AND PROGRAM TYPE

Program	N	Per Cent	MTAI mean	SD
Vocational				
small	73	32	22.40	
medium	105	46	29.55	
large	51	22	34.96	
Total	229	100	28.48	37.74
Nonvocational				
small	131	38	8.11	
medium	128	38	22.46	
large	82	24	17.96	
Total	341	100	15.87	37.78

Comparisons were made in terms of type of program (vocational or nonvocational), size of school, and service as a supervising teacher. Vocational teachers made a significantly higher mean score than did the nonvocational, 28.48 and 15.87 respectively (.01 $P > .05$). Teachers from small schools received a significantly lower mean than those in other school-size strata. Further examination in terms of the type program indicated, however, that it was the teacher in the small nonvocational department whose mean was lowest. Although means for vocational teachers from all three sizes of schools were not significantly different, those for nonvocational teachers were.

The attitude of supervising teachers toward children was a matter of interest. For this study, supervising teachers were defined as those who had supervised two or more student teachers during the two preceding years. Six per cent of the sample had served in this capacity. The MTAI mean for supervising teachers was 35.89, as contrasted to 18.05 for others (Table 39).

Differences significant at the one per cent level of confidence were shown between those supervisors used only by the University of Minnesota and by other teacher-education institutions in the state. This difference was not surprising since the supervisory teachers working with University of Minnesota students are selected by the home economics education staff in accordance with carefully stipulated criteria, while the home economics teacher-educators in some of the schools had no control over either student teaching centers or faculty used. No relationship was found between MTAI means and the number of students the teachers supervised.

Table 39: COMPARISON OF INSERVICE TEACHERS AS TO SUPERVISORY RESPONSIBILITIES

Status	N	Per Cent	MTAI mean	SD
Supervising teachers	92	6	35.89	
University of Minnesota	29		48.86	32.80
Used only by U of M	(21)		51.33	
Shared with others	(8)		42.33	
Other teacher-education institutions	63		29.92	30.49
Nonsupervising teachers	473	94	18.05	38.63

Significant at the .01 level.

Analyses were made to identify possible relationships between University of Minnesota students' and supervising teachers' MTAI scores. Seniors in this group were those of spring and summer session, 1954, and of the 1954-55 academic year. The scores of the former as first-year teachers were also used. The range of students assigned supervising teachers was from 1 to 8 with a mean of 3.7. Since each supervisory had more than one student teacher, some repetition of scores occurs in Table 40. The data suggest that a relationship does indeed exist between scores of the senior students and their supervising teachers, that the one causes the other, however, cannot be assumed. There was no relationship between the scores of seniors as first-year teachers and those of the supervising teacher.

Table 40: RELATIONSHIP BETWEEN SUPERVISING TEACHER AND STUDENT TEACHER MTAI SCORES

	N		MTAI		
Comparison	Senior	Sup. Tch.	Senior	Sup. Tch.	r
Seniors and Supervisors	59	16	70.88	52.12	.38*
Seniors as First-Year Teachers and Supervisors	41	15	41.63	57.95	.18

*Significant at the .01 level.

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Chapter III

INTEREST IN TEACHING HOME ECONOMICS[1]

Hester Chadderdon

Hypotheses and Design for the Study

The characteristic of professional interest was studied on the assumption that teachers with a high interest in teaching are more effective than those with a low interest. Two main hypotheses were explored:

1. interest in teaching home economics at the secondary level changes during the college period and in the first year of teaching.
2. certain factors in the experiences of students and teachers and students' reasons for preparing to teach are associated with interest in teaching.

Factors explored concerning experience previous to college were (1) membership in 4-H Clubs and high school home economics classes and (2) responsibilities for children. The factors which relate to teaching were satisfaction with teaching loads and facilities in departments, types of help obtained from principal and supervisor, satisfaction with teaching, and professional improvement activities during the first year of teaching. In addition, 13 reasons for preparing to teach were investigated.

The Johnson Home Economics Interest Inventory[2], JHEII, was used to obtain an estimate of interest in teaching home economics. This instrument was developed to measure the interests of college students in 14 occupations in the field of home economics: clothing merchandising, county extension work, designing, food product promotion, food service directing, home service, hospital dietetics, interior decorating, journalism or radio, restaurant or tearoom managing, secondary school teaching, social welfare and public health work, textile testing, and work with young children. The key for each occupation was based on an analysis of the responses of criterion groups; i.e., persons employed in an occupation. The secondary school teaching key was employed in the present investigation. The assumption was made that the scores are valid estimates of interest in teaching since the key was developed from the responses of home economics teachers and a reliability coefficient of 0.80 was obtained on the odd-even scores of 300 freshmen students.

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[1] This study was carried out as part of Project 1216 of the Iowa Agricultural and Home Economics Experiment Station. Certain of the findings were reported in the Journal of Home Economics, Vol. 54, No. 5, May, 1962, p. 363-365.

[2] Examiner Manual for the Johnson Home Economics Interest Inventory. Ames: Iowa State University Press, 1955, 15 pp.

The Inventory was administered early in the fall of the freshman year, toward the end of the last term of the senior year, and again near the end of the first year of teaching. At each of these times, the subjects filled out a data sheet[3] relating to the factors to be investigated. The sample of subjects differed somewhat from those in the other studies in this cooperative research project. In order to increase the number of subjects who would be available for the third testing and to broaden the study, institutions throughout the United States were invited to participate. Although a large number did indicate an interest, only 13, in addition to 4 in the original cooperative group, collected sufficient data to be included in the investigation of interests.

To determine whether type of institution was related to professional interest, the schools were classified into three types:

I. Those which were separate land-grant colleges previous to 1950 (now Iowa State University, Kansas State University, Montana State University, Oklahoma State University, and Pennsylvania State University)

II. Other state universities (Mississippi Southern University, Ohio State University, Universities of Illinois, Maine, Minnesota, Nebraska, and Wyoming).

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[3] Copies of the three data sheets are to be found in Appendix C.

III. Others (Carnegie Institute of Technology,* Central Missouri State College, Muskingum College, Southeast Missouri State College and Tennessee Polytechnic Institute)

The subjects by institutions and types are shown in Table 41.

Table 41: NUMBER OF SUBJECTS BY INSTITUTION AND TYPE OF INSTITUTION

	Subjects	
Type and Name of Institution	Freshman and Senior Students	Freshman and Senior Students and First-Year Teachers
I		
Iowa State University	128	64
Oklahoma State University	15	--
Kansas State University	31	15
Montana State University	27	9
Pennsylvania State University	20	--
Total	221	88
II		
Mississippi Southern University	5	--
Ohio State University	72	31
University of Illinois	16	9
University of Maine	15	10
University of Minnesota	16	16
University of Nebraska	19	12
University of Wyoming	5	--
Total	148	78
III		
Carnegie Institute of Technology	15	
Central Missouri State College	4	
Southeast Missouri State College	6	
Muskingum College	3	
Tennessee Polytechnic Institute	6	
Total	34	
Total	403	166

To facilitate analyses of variance the raw scores on the Inventory were divided into three levels: The lowest one-third, the middle one-third, and the highest one-third. This arrangement allowed the study of four interrelationships: type of institution, freshman score, senior score, and a given factor. The data for each factor were quantified either by assigning numerical values where a continuum was involved or by determining the frequency of occurrence.

The hypotheses were tested employing a triple classification analysis of variance, correlations, and tests of significance between means. The five per cent level of significance was used as the base for accepting an hypothesis. The number of cases from Type III institutions was too small to use in the analyses of variance.

Findings

Changes in Interest in Teaching

To test the hypothesis that interest in teaching home economics changes during college and the first year of teaching, correlations between the scores on the JHEII were obtained using 166 cases. Correlations of 0.36 and 0.45 were found between the scores of freshmen and seniors and between seniors and teachers respectively. Although these are both significant, neither is high enough to be used alone as a satisfactory basis for prediction of interest at the senior or teaching levels. The mean scores and standard deviations for the three levels were 316.0 ± 13.19; 321.6 ± 13.59; 322.3 ± 11.47 when the scores for the 166 cases were considered. The mean scores for the 403 cases were somewhat lower: freshmen 314.6 and seniors 319.1. Although there was a tendency for the scores of these students to rise during the college years, the differences between the scores were not statistically significant. Thus the evidence does not support the hypothesis that the interest in teaching changes from the freshman year until the end of the first year of teaching.

A profile chart was developed by Johnson based on the scores of 460 freshmen home economics students. The mean score of 316.0 in this study is at the 75th percentile for secondary teaching. Using the profile chart based on the responses of 100 home economics teachers, the mean scores of 321.6 for seniors and 322.3 for first-year teachers fall approximately on the 16th percentile.[4] This suggests either that the interest of seniors and first-year teachers is lower than the interest of teachers with more experience or that teachers with less interest tend to leave the field after a short period of experience.

Earlier studies of home economics students at Iowa State University produced somewhat different findings. Both Rachut[5] and Scholl[6] obtained higher correlations between freshman and senior scores for students preparing to teach: 0.51 and 0.40 respectively. Rachut found a somewhat higher correlation for senior and on-the-job scores: .48 compared with .45 in the present study.

The permanence of vocational interests has been the subject of many studies using Strong's Vocational Interest Blanks, but unfortunately none has been reported in the literature which gave statistics for college women and the field of teaching. Strong[7] has found evidence, however, that interest scores of men are quite stable among most professional groups.

Factors Associated with Students' Interest in Teaching

Before making the analyses to determine the relation of certain factors to interest in teaching, it appeared desirable to explore the possible relation of type of institution to the factors under study. When the analyses of variance were computed using subjects from Type I and II institutions, there was no evidence to support the hypothesis that type of institution was a source of variance in any of the relationships studied using an F-value of five per cent as a base. Hence this source of variation was eliminated in subsequent analyses.

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[4] Examiner Manual for the Johnson Home Economics Interest Inventory, Op. Cit.

[5] Rachut, Stella. Stability of Johnson Home Economics Interest Inventory Scores on Three Levels: Freshman, Senior, On-the-job. Unpublished M. S. thesis (Ames: Iowa State University, 1958), p. 50.

[6] Scholl, Phyllis C. Stability of Johnson Home Economics Interest Inventory Scores for Freshman to Senior Year. Unpublished M. S. thesis (Ames: Iowa State University, 1955), p. 36.

[7] Strong, Edward K., Jr. Vocational Interest 18 Years After College (Minneapolis: University of Minnesota Press, 1955), p. 207.

Educational experience previous to college was one of the factors studied. On the Freshman Data Sheet, the students indicated the number of years they had been enrolled in home economics classes in junior and senior high school and also the number of years they had been a member of a 4-H club. The following values were assigned for the amount of experience:

0 - no enrollment or membership
1 - 1 year or less in both or either (classes or 4-H clubs)
2 - 2 years in one; less in the other
3 - 2 years in both
4 - more than 2 years in one
5 - more than 2 years in both

Use of the triple classification analysis of variance to determine relationship of freshman and senior mean scores to amount of experience of this type revealed no significant differences. The hypothesis that the interest scores of the freshmen and those of the seniors were related to amount of previous experience in homemaking education (home economics classes or 4-H club) was rejected.

Grabe [8] obtained somewhat different results when she related freshmen scores on the JHEII to experience in high school home economics classes alone. She obtained an F-value that approached significance at the 5 per cent level with 92 Iowa State University students. The data she collected concerning this experience, however, differed from those in the present study, since she asked the students to indicate whether they took home economics courses because they were required or elective. The mean JHEII score for those who took only required courses was 319.0 and for those who elected some courses was 327.0. When Grabe analyzed these interest scores in terms of participation in 4-H clubs, she obtained an F-value significant at the 1 per cent level. Her classification of this experience differed in that she used these four groupings: no opportunity to belong, did not choose to join, less than two years of membership, and two or more years of membership. The mean interest scores for those reporting no opportunity to belong was 317.7 and for those with more than two years or experience was 329.10.

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[8] Grabe, Gladys. Relationships Among Interest in Teaching Home Economics, Attitude Toward Teaching, and Personal Background Factors. Unpublished M. S. thesis (Ames: Iowa State University, 1956).

Another type of experience previous to college, that relating to children, was explored. The data concerning the amount of experience with children were summarized by assigning numerical values to six experiences, such as babysitting and superivision of playground, in terms of amount of experience and responsibility assumed. A value of one was given each response of "helped someone else," two "had responsibility on a few occasions," and three "had extensive responsibility." The highest possible score was 18. When these scores were analyzed in relation to the JHEII scores of freshmen and seniors using the triple classification analysis, there was no evidence to support the hypothesis that the interest scores were related to amount of experience with children previous to entering college. Most of the students had experience scores between 3 and 11, a total of 91.1 per cent.

In her study of Iowa State University students, Grabe likewise found no statistically significant differences between experience with children and the JHEII scores. She derived an experience score in much the same manner as in the present investigation. The mean interest scores were almost identical, 321.5 and 321.6 for those with experience scores of 0 to 4 and 12 or more.

Reasons for Interest in Teaching

The question of what motivates students to select teaching as an occupation has been explored in recent years by many educators, both on the theoretical and research levels. After reviewing the literature in 1957, Lloyd-Jones and Holman[9] questioned the frequent assumption that the decision to teach is made rationally and that prospective teachers are aware of their own motives. They examined the theory that the individual's basic needs are the motivational force but suggested it would be unrealistic to assume that this is the entire answer since there is not complete freedom of choice. Economic and social factors, they say, may supercede needs. For women who are interested in marriage, these factors may be particularly influential. The investigation by Lang[10] suggests that the motives of prospective teachers vary with the level at which they plan to teach. When the Lang Scale of Motives for Teaching was used with women students, 101 preparing to teach at the elementary level and 87 at the secondary level, the former tended to select reasons relating to the "mothering" role and the latter to the "director of learning" role.

One illustration of an attempt to explore the need theory and the choice of teaching as a career is the study made by Merwin and DiVesta.[11] They compared 67 freshmen college students at Syracuse University who indicated preference for a teaching career with 151 who indicated another career choice using four scales they had developed: need for achievement, for affiliation, for dominance, and for exhibition. In addition they administered an instrument to measure the concept of the potential which teaching has for satisfying these four needs and a scale to measure attitude toward teaching as a career. They found that the teaching group had a significantly higher mean score than the nonteaching group on the scale relating to need for affiliation, and the latter group had higher mean scores on the other three scales. The teaching group scored higher on the scale concerned with the extent to which teaching was perceived as satisfying the four needs. The attitude scale differentiated at the one per cent level; those preferring a teaching career had higher scores than the nonteaching group.

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[9] Lloyd-Jones, Esther, and Mary V. Holman. "Why People Become Teachers," in Lindley J. Stiles (Ed.) The Teacher's Role in American Society, Fourteenth Yearbook of the John Dewey Society (New York: Harper and Bros., 1957), p. 235-246 and p. 298.

[10] Lang, Gerhard. "Motives in Selecting Elementary and Secondary School Teaching," Journal of Experimental Education, Vol. 29, No. 1 (September, 1960), p. 101-4.

[11] Merwin, Jack C. and Francis J. DiVesta. "A Study of Need Theory and Career Choice," Journal of Counseling Psychology, Vol. 6, No. 4 (Winter, 1959), p. 302-8.

Holland[12] criticized previous theories of vocational choice as either too broad or too specialized and proposed a theory that "at the time of vocational choice the person is the product of the interaction of his particular heredity with a variety of cultural and personal forces including peers, parents, and significant adults, his social class, American culture, and the physical environment." He classified occupations by environments: the motoric, the intellectual, the supportive, the conforming, the persuasive, and the esthetic. Teachers he places in the supportive environment along with social workers, interviewers, vocational counselors, and therapists.

In the present study, an attempt was made to secure some indication of the motivations of students by asking seniors to check no more than 3 of 13 reasons as important in their selection of teaching and to double check the one of greatest importance. For the purposes of analyses, these reasons were classified thus:

Practical reasons

1 - Availability of jobs

2 - In emergency can return to field after marriage

3 - Salary

4 - This career combines well with marriage

5 - Vacations and hours are desirable

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[12] Holland, John L. "A Theory of Vocational Choice," Journal of Counseling Psychology, Vol. 5, No. 1 (Spring, 1958), p. 44-49.

Desire to work with people

6 - Strong desire to work with young people

7 - Work with people rather than alone

Breadth of curriculum in home economics education

8 - Broad education in home economics

9 - Interest in more than one area of home economics

10 - More opportunities to take courses in areas other than home economics

Persons advised this preparation

11 - Family or others strongly urged that they prepare for this occupation

12 - Adviser or counselor advised them to prepare for this occupation

The thirteenth reason was: have been interested in this occupation for a long time.

The method used to weight their responses is illustrated by that used for the three reasons concerning breadth of curriculum:

0 - no reason checked

1 - 1 reason single checked

2 - 2 or 3 reasons single checked or 1 double checked

When the scores derived from the weighted responses for each group of reasons and for the single reason were analyzed with reference to the JHEII scores of freshmen and seniors, no significant relationships were found. Hence there was no evidence that the scores of either freshmen or seniors on the Interest Inventory were related to the reasons for choosing home economics teaching studied. Only one analysis approached significance at the five per cent level, that of freshmen interest scores and reasons related to breadth of curriculum. One-third of the students failed to check any of the 3 reasons classified under this heading, but 34.0 per cent indicated that 1 of these reasons had been among the 3 most important in their selection of teaching, and 28.7 per cent selected 1 of the 3 as the single most important reason.

The choice of a profession by college women is complicated by the fact that in American society today, a woman is expected to assume the role of homemaker. She may choose to combine this role with paid employment. If she does, her occupational choice probably will be made, in part at least, by practical considerations such as hours of work and availability of jobs. Since men are not faced with this problem of combining two roles, studies relating to motivation need to analyze data by sex. Unfortunately many reports in the literature fail to indicate sex differences.

In this study of home economics students preparing to teach, all but 28.2 per cent disclosed that at least 1 of the 5 practical reasons had influenced their choice of a major in college. Only 21.5, however, double checked this type of reason.

Several other studies have involved practical considerations. In one, 16 statements relating to choice of teaching as an occupation were presented to college students in 3 California colleges.[13] Two of the practical reasons in the present investigation Jantzen also found to be high in frequency for the women: reasonable assurance of adequate income and summer for study, travel, and relaxation.

The question of marriage and career was raised by two of the practical reasons in the present study: "This career combines well with marriage", and "In emergency can return to the field after marriage". Vetter's[14] study of senior home economics students is pertinent since she obtained an estimate of their degree of career vs. marriage orientation. Her sample included a large proportion of students preparing to teach. Using the Strong Vocational

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[13] Jantzen, J. M. "Opinionaire on Why College Students Choose to Teach," Journal of Educational Research, Vol. 53, No. 1 (September, 1959), p. 13-17.

[14] Vetter, Louise B. C. Some Correlates of Homemaking vs. Career Preference Among Senior College Women. Unpublished M. S. thesis (Ames: Iowa State University, 1962), p. 55.

Interest Blank for Women, Form W, she found that the lower scores on the Home Economics Teacher Scale tended to be associated with the preference for a career. The two Strong scales that correlated highest with career orientation were Lawyer and Life Insurance Saleswoman, +0.27 and +0.26 respectively. The career vs. marriage orientation of college freshmen was also investigated at Kansas State University.[15] Scores on 28 scales of the Strong Vocational Interest Blanks and 16 scales of the Edwards Personal Preference Schedule were compared. Tests indicated statistically significant differences at the 5 or 1 per cent level between the career and the homemaking oriented groups on 16 of the former scales and 5 of the latter. On the Home Economics Teacher Scale, the homemaking group mean was significantly higher than that for the career-oriented group whereas for several scales the career group had the higher mean scores; for example, artist, physician, and lawyer.

Five hundred and thirty students enrolled in the first course in education at the Ohio State University, when asked to rank eight job considerations in order of importance, most frequently listed salary as third in rank; security, second; excellence of working conditions, sixth; and possibilities of advancement, eighth. Richards[16] did not analyze her data by sex or by level of teaching. Almost all of the students agreed that one of the advantages of teaching as a career was that it was "good preparation for family life". Eighty per cent saw "summer free" as an advantage but only 12.7 per cent indicated that the shorter hours were an asset.

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[15] Hoyt, Donald P. and Carroll E. Kennedy. "Interest and Personality Correlates of Career-Motivated and Homemaking-Motivated College Women," Journal of Counseling Psychology, Vol. 5, No. 1 (Spring, 1958), p. 44-49.

[16] Richards, Rachel. "Prospective Students' Attitudes Toward Teaching," Journal of Teacher Education, Vol. 11, No. 3 (September, 1960), p. 375-380.

Another study concerned with practical consideration in the decision to prepare for teaching was carried out at the University of Utah.[17] Thirty per cent of the students enrolled in the College of Education indicated that they saw teaching as "something to fall back on". Homemaking was the major or second role choice of many of the students.

Since teaching involves working with people, two reasons relating to this were included in the present study. Close to one-half, 43.4 per cent, failed to indicate either of these as a factor in her decision to prepare for teaching. Perhaps the word "strong" in one reason, "Strong desire to work with young people", was so forceful that some students were reluctant to react positively. Almost one-fourth, 24.9 per cent, however, either single checked both reasons or double checked one.

Tomlinson[18] investigated some of the factors associated with high and low scores on the JHEII of freshmen home economics students at Iowa State University. She interviewed 26 students who scored on or above the sixtieth percentile on at least one occupational key and 26 who scored below the shaded area on the Interest Chart on each of the 14 keys. Only two in the high interest group chose teaching whereas seven in the latter had made this choice. Six of these seven gave as their reason for choice of teaching "like to work with people" or "opportunity to help other people", and one of the two in the high group gave a reason indicating a desire to work with people.

The women in the ten-year study by Jantzen[19] more frequently checked a reason indicating a desire to work with people than any of the other 15 reasons.

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[17] Haubrich, Vernon F. "The Motives of Prospective Teachers", Journal of Teacher Education, Vol. 11, No. 3 (September, 1960), p. 381-386.

[18] Tomlinson, Lillie B. Factors Related to High and Low Scores on the Johnson Home Economics Interest Inventory. Unpublished M. S. thesis (Ames: Iowa State University, 1951), p. 81.

[19] Jantzen, J. M. Op. Cit.

The percentages varied during the period from 80 per cent in 1948 to 93 per cent in 1956. To discover factors believed to have influenced the decisions of 48 men and 182 women in an introductory education course at the University of California, Fielstra[20] had them rate a list of 14 statements as to importance. One of the three which was considered most important was the opportunity "to work with children and adolescents and to be an inspiration to them". The group included sophomores, juniors, seniors, and graduate students. In Richards' study[21] 98 per cent of the students indicated the belief that two of the assets of a teaching career were the "chance to help others" and "helping children learn".

Two of the reasons for selection of a major related to the persons who had advised them to prepare to teach: family or others strongly urged that they prepare for this occupation, and adviser or counselor gave them similar advice. Only 11.8 per cent of the 403 students indicated that anyone had influenced their choice.

In a study of freshmen at Oklahoma State University, Lehrling[22] found little indication that home economics students had been influenced by others in their choice of a major. In contrast, when freshmen and transfer students at 6 Nebraska colleges[23] were asked who had influenced them to select home economics as a major, 75 per cent referred to their mothers and 25 per cent to their fathers. Other relatives were less frequently checked but home economics teachers were second to mothers, 33 per cent. Only six per cent indicated that a counselor had so advised them. When freshmen students who had scored either very high on at least one key or low on all keys of the JHEII were interviewed by Tomlinson,[24] the low group more frequently said they believe they were influenced by the advice of others, significant at the five per cent level and were influenced to a greater extent, significant at the one per cent level. All reported, however, that this type of influence was directed more commonly toward the general field of home economics rather than for a specific area. The career-oriented home economics seniors in Vetter's[25] investigation more often reported that their parents were neutral or mildly disapproving of their occupational choices whereas the parents of the homemaking-oriented daughters were usually enthusiastic. A comparison of the responses of freshmen and senior college students may not be valid particularly when the former include students interested in several areas of home economics rather than in only education. Also it is possible that seniors have forgotten these earlier influences.

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[20] Fielstra, Clarence. "An Analysis of Factors Influencing the Decision to Become a Teacher," _Journal of Educational Research,_ Vol. 48, No. 9 (May, 1955), p. 659-667.

[21] Richards, Rachel. _Op. Cit._

[22] Lehrling, Leona M. _Factors Influencing the Selection of Home Economics as a Field of Study_. Unpublished M. S. thesis (Stillwater: Oklahoma State University, 1947), p. 42.

[23] Wright, Elizabeth H. _A Survey of Persons and Activities Influencing Girls to Enroll in Home Economics in Nebraska Colleges_. Unpublished M. S. thesis (Lincoln: University of Nebraska, 1951), p. 73.

The statement on the Senior Data Sheet relating to a long-time interest in teaching, "have been interested in this occupation for a long time", was checked by 38.5 per cent as one of the 3 most important factors. More than one-fifth, 21.0 per cent, indicated that this was the most important factor, which may help to explain why seniors did not more frequently check some of the other reasons; their decision may have been made so long ago that they were not aware of the effect of specific reasons on their choice.

The factor of time was also investigated by Grabe[26] who asked 93 seniors at what age they had decided to prepare for a teaching career. Nine were unable to pinpoint a specific age but more than one-half, 55.9 per cent, said they had made the decision when or before they were 17 years of age. Vetter[27] discovered a difference, significant at the one per cent level, between the extent to which two groups of home economics seniors had chosen a college major before graduation from high school. The career-oriented students more frequently than the homemaking-oriented had decided on a college major at this time; the latter tended to have selected home economics as a field but had not decided upon the area.

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[24] Tomlinson, Lillie B. Op. Cit.

[25] Vetter, Louise B. C. Op. Cit.

[26] Grabe, Gladys. Op. Cit., p. 63.

In her comparison of freshmen whose scores on the JHEII were either very high or very low, Tomlinson[28] found little difference in the time at which they said they had selected home economics as a field of study; more than three-fourths of both groups had made the decision during high school. They were not asked, however, when or if they had decided on an occupation within the field. More than half, 54 per cent, of the prospective women teachers in Jantzen's[29] study revealed that they had reached their decision before high school graduation and 36 per cent during the first 2 years in college. The other 10 per cent were upper-division or graduate students at the decision-making time.

The 403 seniors in this study, in addition to indicating their reason for choice of their major, were asked to record their first and second choices of 14 home economics occupations they would prefer to enter if entirely free to make a choice. The purpose of this was to discover the extent to which they were satisfied with their choice. Since county extension work is a type of teaching and since in some institutions the curriculum is the same or very similar to that for prospective teachers, reactions to both occupations were analyzed. There was evidence beyond the one per cent level of significance to support the hypothesis that freshmen interest scores on teaching are related to their desire as seniors to do county extension work. The hypothesis that senior interest scores are positively related to their desire to become teachers was also supported; the differences approached significance at the one per cent level between the interest scores of those who desired to enter teaching and the scores of those wishing they could enter another occupation. Teaching was a first choice for 56.7 per cent and a second choice for 24.6 per cent of the students in the sample. Extension work was a first choice for 9.6 per cent and a second choice for 14.2 per cent. Approximately one-fifth, 19.5 per cent, indicated an interest in both types of positions but 58, 14.4 per cent, failed to check either as a first or second choice. These students probably were preparing to teach for practical reasons rather than because they were greatly interested in becoming teachers.

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[27] Vetter, Louise B. C. Op. Cit.

[28] Tomlinson, Lillie B. Op. Cit.

[29] Jantzen, J. M. Op. Cit.

When French[30] explored the satisfactions of seniors in three colleges with their choice of major, he found a larger proportion than in the present study were dissatisfied, approximately one-fourth. His sample included 107 home economics students and more than three-fourths of them, 76.6 per cent, indicated satisfaction with their major.

Factors Associated with Teachers' Interest in Teaching

To test the hypothesis that certain conditions and experiences during the first year of teaching were related to the interest scores of the 166 teachers, several analyses of variance were made but none of the F-values even appraoched significance. Hence there was no evidence that their satisfaction with teaching generally, with their teaching load, with the space and facilities in their department, with the help given them by their principal or home economics supervisor were related to their scores on the JHEII administered toward the end of their first year of teaching.

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[30] French, John W. "Aptitude and Interest Score Patterns Related to Satisfaction with College Major Field," Educational and Psychological Measurement, Vol. 21, No. 2 (Summer, 1961), p. 287-294.

A large proportion, 82.3 per cent, indicated that they liked many aspects of teaching and 17.1 per cent that they liked some aspects. The failure to find that these responses were related significantly to their JHEII scores may be due to the crudeness of the measure of their feeling about teaching.

In a national study[31] of home economics teachers in 1947, a similar type of measure was employed as one means of determining satisfaction with the job. The proportion who said they liked their job was only slightly higher, 86 per cent, than in the present study. Almost 63 per cent indicated that they liked teaching about as well as most people like their jobs and 34 per cent that they liked it better than most people like their jobs. In addition an inventory consisting of 86 items relating to various aspects of teaching was administered to obtain a more extensive estimate of job satisfaction and to determine some of the factors associated with it. Significant differences were found between the scores on the satisfaction inventory and years of teaching experience. Those who had taught less than one year had lower scores than those with three or more years of experience.

When the 166 first-year teachers were asked whether their load was satisfactory, fairly satisfactory, or too heavy, a large majority, 69.0 per cent, responded "Satisfactory" and 8.5 characterized their load as "Too heavy". In the national study the actual teaching load was determined using the Douglass formula. This correlated -0.10 with the score on the satisfaction inventory.

In the present study only 40.0 per cent judged their space and equipment as adequate for all of the groups they were teaching, 14 per cent indicated that plans had been made for improvement, 6.0 per cent no plans. Although the JHEII scores did not vary significantly with the judgment concerning space and equipment by 166 first-year teachers, in the national study[32] the teachers who reported that plans had been made for improvement scored higher on the satisfaction inventory than those reporting no such plan being made or soon to be carried out.

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[31] Home Economics Research Committee, Home Economics Education Section. Factors Affecting the Satisfactions of Home Economics Teachers, AVA Research Bulletin No. 3 (Washington, D. C.: American Vocational Association, May, 1948), p. 96.

When the type of help given them by their high school principal and their home economics supervisor (local, city, district, state, or itinerant teacher trainer) was explored, the most frequent response for principals was, "Gives me suggestions when I ask for them", 53.7 per cent, and for home economics supervisors, "Helps me find ways to solve problems I ask about", 60.0 per cent. More than one-fourth, 27.4 per cent, however, indicated that their principal "Leaves me alone" and almost one-fourth, 24.7 per cent, that the supervisor "Gives me little or no help".

These first-year teachers were asked about their experience which had led to professional improvement. They listed activities such as these: conferences, courses, and reading, incidated whether they had participated in them and whether they had used the ideas gained. Scores were derived by assigning a weight of one to participation and two to use of ideas. The JHEII scores did not vary significantly with the scores obtained from the teachers' responses.

Implications

The fact that the mean scores of freshmen, seniors, and first-year teachers did not increase significantly indicates interest is sufficiently stable that the freshmen scores can be of value in predicting the scores of seniors and teachers. The scores would need, however, to be supplemented with other data to make satisfactory predictions of interest. A further investigation might well be made to determine whether scores obtained after a year of college would give a better prediction than those secured early in the freshman year. The higher correlations found by Grabe[33] and Scholl[34] in studies involving only students at Iowa State University suggest that the predictive value of the scores may vary by institution. No significant differences were found, however, between the scores on the JHEII, secondary teaching key, in two types of universities, state universities and universities which had been separate land-grant state colleges previous to 1950. It would appear, therefore, that in further investigations involving students in several institutions of these two types, there would be no need to stratify the sample on this basis. A study needs to be undertaken to determine whether students from other types of institutions would differ from students in these two types.

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[32] _Ibid_.

In future studies in which an attempt is made to discover what pre-college experiences tend to be related to interest in teaching home economics, other factors should be explored. Neither the two factors involved in this study, amount of experience in the home economics education (class and 4-H club) or experience with children previous to college, proved to be related to their freshman or senior scores. Also Grabe's findings indicate that extent of election of high school home economics courses is a more fruitful approach than the number of years courses were taken. Studying the factor of courses and of 4-H club membership separately is also recommended for future investigations. The reason for failure to find a relation between interest scores and previous experience with children is not clear. Perhaps the element of enjoyment rather than amount and type of experience and responsibility needs to be explored.

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[33] Grabe, Gladys. Op. Cit.

[34] Scholl, Phyllis. Op. Cit.

The question of what motivates students to choose teaching as an occupation is certainly an open one. As institutions attempt to find sound bases for selecting students for entrance into the profession, the need for answering this question becomes increasingly important. Haubrich[35] believes that "Teaching as a sidelight to the major purposes of life seems to be one of the overriding problems that face colleges of education". In a field that is dependent almost entirely on women, many of whom are more marriage- than career-oriented, this poses a real problem. If a sound means could be found to determine their motivation for teaching, the prediction of teaching success could no doubt be improved. Also better guidance could be given students whose motives for teaching are not consistent with their choice to the end that better teaching and better satisfied teachers would result. Perhaps additional exploratory experiences could be used to help these students see the possibilities in the teaching field for achieving their goals or see the need for changing their career choice. The finding that neither teaching nor extension work was the first choice of one-third of the seniors in the study points up the need for studies of motivation and bases for selection of students in teacher education.

The inability to establish a relation between the interest scores of teachers and their satisfaction with teaching generally suggests the need to obtain a better measure of satisfaction. It is possible that many other factors than interest in teaching enter into satisfaction. The ones explored here did not reveal the answer for first-year teachers. In the national study of teacher satisfaction[36] it was found that teachers with three or more years of experience tended to have higher satisfaction scores than those with less than one year. Whether this resulted from those teachers remaining in the field who were better satisfied or from their obtaining more satisfaction after they had additional experience is not clear. A study of the JHEII scores of the teachers in the present study who remain in teaching a second year might give some clues to the relation of the scores to satisfaction.

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[35] Haubrich, Vernon F. Op. Cit.

[36] Home Economics Research Committee, Home Economics Education Section Op. Cit.

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Chapter IV

ATTITUDES TOWARD GROUPS AND FAMILIES

Ruth T. Lehman

A third characteristic believed to be important for home economics teachers and those preparing to teach in this area is acceptance of individuals unlike oneself and of groups different from one's own.

Several assumptions were basic to a study of this characteristic. The first was that *those who accept persons different from themselves are more effective as teachers than those who do not*. Can a teacher seriously lacking in this respect establish and maintain optimum rapport with pupils and with parents, or in fact, with his colleagues or administrative staff? Is one truly interested in teaching, unless he has an interest in and a concern for his pupils without reference to who they are or what they are like?

A second assumption was that something can be done about one's attitudes toward others; that *experience can increase understanding, and that with understanding may come an increase in acceptance*. A third assumption then logically follows: that *the college has a responsibility for helping students to assess their own attitudes and broaden their experience with other groups, particularly with those of whom they have little first-hand knowledge and toward whom they have strong prejudice*.

These assumptions reflect Prescott's emphasis on the importance of teachers understanding children in their social setting.[1] They also--in-so-far as attitudes may be said to reflect values--are consistent with the position taken by Hullfish that in fact values should be the concern of education.[2]

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[1] Staff of the Division on Child Development and Teacher Personnel. *Helping Teachers Understand Children* (Washington, D. C.: American Council on Education, 1945).

The two main hypotheses which were tested in this aspect of the study dealt with change and related factors.[3] These together with their subhypotheses follow.

1. Attitudes toward certain groups change during the time represented in this longitudinal study.
    a. They change in the two years between the beginning of the students' professional program and graduation.
    b. They change in the time between graduation and the close of the first year as a professional person--in this instance, as a teacher.
2. Certain factors of socioeconomic background, of experience, and of the school situation are significantly related to attitudes held.
    a. Background factors which are related to attitudes held are: size of home community, level of parents' education, and father's occupation.
    b. Aspects of experience significantly related to attitudes held are:
        (1) Acquaintance with different groups
        (2) Pleasantness of experience with groups
        (3) Variety of experience
        (4) Specific kinds of experience
    c. Factors in the school situation significantly related to attitudes held are:
        (1) The degree to which the teacher has found discipline to be a problem
        (2) The general attitude of the administration and faculty toward home economics

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[2] Hullfish, H. Gordon. "The Job Ahead in General Education," Journal of Home Economics, XXXVIII (November, 1946), p. 573-74.

[3] D. Ransom Whitney, Director of the Statistics Laboratory, and a member of his staff, Mrs. Lydia Kinser, Ohio State University, served as consultants on the statistical aspects of this part of the study.

(3) The mental ability of the students enrolled in home economics

(4) The teacher's attitude toward teaching and toward working with young people.

The sample included students attending and teachers prepared by six institutions: the Universities of Illinois, Minnesota and Missouri, and Iowa, Michigan and Ohio State Universities. Data regarding these students and teachers were obtained in three stages: at the beginning of the junior year as majors in home economics education, later near the close of the senior year, and finally toward the end of the first year of teaching home economics. The numbers involved were 513, 366 and 197, respectively. The collection of data began in the autumn of 1959 and closed in 1962-63.

No instrument was available which would sample attitudes toward all the groups desired. The Cooperative Committee for this study assumed that it is often the degree to which a teacher accepts a variety of groups--not only certain specific groups or persons--which determines how effective he will be in working with students. What was needed was an instrument which would sample attitudes toward: parents today, people in different size communities, divorced persons, working mothers, foreigners, persons with different degrees of education, persons of different religious faiths, families of different socioeconomics classes, persons involved in a school with many disadvantaged pupils, factory workers, persons of another race, and youth and old age. Previous scales and inventories had tended to deal with only one of these categories, and often with only a minority group.[4] For the purpose of the study, therefore, an instrument was developed at The Ohio State University. It was called "Just Suppose: A Teacher Opinion Inventory". When revised at the close of the study, it was renamed "The Teacher and the Community".

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[4] Such types for example as Thurstone's Attitude Scales on the church, Negroes, Jews, war, Chinese, and so on; Bogardus' four Social Distance Scales on ethnic, religious, occupational, and political groups; and Scale of Beliefs on Social Issues developed by Tyler and his evaluation staff in the eight-year study for the Progressive Education Association.

Development of the Inventory

Obtaining Attitude Statements

Three methods of obtaining attitude statements were explored: free writing, interviews, and an incomplete sentence form.

In the first case, students in a home economics education course were asked to react in writing to these questions:

1. What type of student do you hope you will have in your classes when you go out as a teacher?
2. What type of student do you hope you will never have in your class?
3. What kinds of homes and families would you like to work with?
4. What kinds of homes and families do you hope you will never have to work with?

The questions elicited a number of attitudes, but some students had difficulty in expressing themselves. Many wrote too briefly; for example, one said "It would be awfully hard for me to teach some of the children I observed at ____________High School."

Therefore, interviews were held with a sample of the students to obtain reasons for choice or rejection of certain types of pupils and homes. Familiarity with the problems of pupils and families of the middle socioeconomics class and from rural homes is an illustration of one reason which frequently was given for preferring to work with those groups. Uncertainty as to what she as a prospective teacher might be able to do for pupils from the upper class is another. A preference for pupils who were interested in learning and willing to work is still another. Even in interview, however, some students had difficulty in verbalizing their feelings.

The next method considered for securing attitude statements was some type of projective technique.[5] The technique used by Rotter in his Incomplete

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[5] Anderson, Harold H. and Gladys L. Anderson. An Introduction to Projective Techniques (New York: Prentice-Hall, Inc., 1951).

Sentence Blank[6] appeared promising. Hence, a list of stems, each including a stimulus word, was developed to evoke expression of attitudes toward minority groups, different socioeconomic levels, community differences and certain differences within families. The resulting form was tested with a home economics education class enrolling juniors, and with a class studying the family which enrolled freshmen and sophomores who were either majors in home economics or nonmajors.

When a sample of their responses was examined by the Cooperative Committee, the decision was reached to use this technique to secure attitude statements from a larger number of students. The Incomplete Sentence Form (shown in Appendix D, p. 192) was administered in 5 colleges to approximately 400 students, including both men and women, and home economics and other majors. The classes enrolled freshmen mainly and provided more than 10,000 statements.

These statements were sorted and duplicates and neutral statements discarded. The committee members then individually classified them as favorable, or unfavorable, or not classifiable with reference to the group under consideration. Later the committee judged the statements again relative to whether they described an acceptant or a nonacceptant person. Statements on which there was high agreement by the jury were selected for trial.

Developing the Inventory

Twelve problems were described, each involving a situation in which a teacher might conceivably find himself and a group (or several related subgroups) to which he might have to relate himself as a teacher. For example, one problem dealt with "parents today", while another relating to community size had three subgroups--farm, small town, and city people.[7]

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[6] Rotter, Julian B. and Janet E. Rafferty. Manual: The Rotter Incomplete Sentence Blank (New York: The Psychological Corporation, 1950).

For the trial instrument, the plan was to use at least twice as many of the statements secured through the Incomplete Sentence Form as might appear in the final inventory. Accordingly, Form A of the inventory included the 12 problems, each followed by 20 statements representing different viewpoints or degrees of acceptance. Form B repeated the problems, but used 20 other statements. This made responding less monotonous because it could be done in two sittings.

In selecting statements, an attempt was made to have an equal number of favorable and unfavorable ones for each problem. Also, in cases where two or three subgroups were included within a problem, the statements referring to each subgroup were balanced in number.

The test was administered to two criterion groups of teachers in order to identify the best statements to use. These teachers had been previously identified by city and state supervisors by checking possible evidences of a teacher's acceptance or nonacceptance of different kinds of persons or groups. (See Appendix D, p. 196 for the rating sheet used.) Admittedly this plan had certain weaknesses, but it seemed the only feasible method.

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[7] For the sake of clarity here and on later pages, the problems and subproblems in both trial and experimental forms are listed here:

Parents today
City people
Small town people
Farm people
Divorced persons
Working mothers
Foreigners
Adults with little education
Adults with college education
Slum families

Catholics
Jews
Protestants
Upper class people
Middle class people
A problem school
Factory workers
Persons of another race
Youth
The aged

A total of 240 teachers were rated in this manner. A value of +1 was assigned to each checked evidence of acceptance, and a -1 to each evidence of nonacceptance. The algebraic sum of the plus and minus checks then became a teacher's acceptance rating. All teachers (222 in all) who rated from 0 to -15, or +10 to +23 were asked to react to the trial inventory. The 166 who participated were distributed over 16 states and the 4 regions of the United States: 103 came from the acceptant group and 63 the non- or less-acceptant group. (See Appendix D, Tables XXI, p. 175 and XXXII, p. 198.) The first table gives the proportion of both the acceptant and nonacceptant teachers who had been rated on each positive evidence of acceptance. The second table gives the same data for each evidence of nonacceptance. The contrast is marked.)

When the inventory was administered to these teachers, they were asked to indicate in the appropriate column on the answer sheet the extent to which they agreed with each statement, using a give-point scale from "strongly agree" to "strongly disagree". The items were then scored by the Likert scoring method. In other words, the response "strongly agree" on unfavorable statements was scored one and "strongly disagree" five. The values of all favorable statements, on the other hand, were in the reverse order.

Mean scores on each statement were calculated for the acceptant and nonacceptant teachers. Statements for which the mean scores of the two groups differed most were used in the revised inventory. Because unfavorable statements in general discriminated better than favorable ones, the resulting inventory lost the balance which had existed in the trial instrument.

This shorter form was then tested with 132 home economics freshmen and 50 home economics education seniors in one of the universities. Approximately 50 of these students were also interviewed as a rough check on the validity of test scores. In the light of testing and interviews, final revision was made. Problem X from this form is given as an illustration.[8]

X. JUST SUPPOSE: You are teaching in a manufacturing section of the city zoned for light and medium industry. In a recent meeting, your principal said that he wished some of the faculty would live in the community instead of commuting from a distance. You and several other teachers are having a lively discussion on the matter, some threatening to resign, some being interested in doing as the principal suggests. How do you feel about the families in this community?

136. Families of the laboring class are usually good-hearted, "down-to-earth" people.

137. Factory workers don't appreciate what the schools do for them.

138. They have a very dull, uninteresting life.

139. There would be too many problem children in such a school for me to enjoy teaching there.

140. The laboring class is necessary, I suppose, but I would not want to be one of that group.

141. Many of the people in this community would be just as interesting as those who work in the professions.

142. A teacher could be more effective in the schoolroom if she lived in the same community as her pupils.

143. Families of the laboring class are hard to work with because they have so many prejudices.

144. They are distressingly lacking in the niceties of social living.

145. Families of the laboring class spend their money so foolishly.

146. I'd like to have a chance to know families in this community as neighbors.

147. I would be unhappy living in this community.

148. It is unreasonable for the principal to expect teachers to live among factory workers.

149. The parents here won't be interested in the school.

150. Factory workers are just as fine as people of the white collar class.

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[8] Quoted by permission from the Journal of Home Economics, LIV (June, 1962), p. 471.

Validity and Reliability of the Inventory

Certain steps already described in the construction of the inventory were taken to promote face validity. These were:

1. the collection of statements from college students, on the assumption that a sample of attitudes typical of students would be obtained;
2. the jury classification of the statements as representing acceptant or nonacceptant positions; and
3. the use of criterion groups of teachers to identify discriminating statements.

Validity of scores was studied in several ways involving the home economics juniors in the first stage of the project. Two sections of a Junior Data Form, filled out by students after checking the inventory, provided information for two methods used. (Appendix D, Sections C and E, p. 202.)

In one section, a forced-choice verbalization of attitude was requested. All groups or types of persons included in the inventory were listed and respondents rated their feelings toward each, using a rating code which ranged from zero (for "strongly dislike people in this group") to four ("very much like them"). A sum of these ratings gave a total self-estimate of attitude. Scores on the individual problems (or subproblems) in the inventory were found to be significantly associated with the related self-rating, except in the case of working mothers. The chi-square values were significant at or above the one per cent level of confidence on all but attitude toward the aged, where it was the five per cent level. The association of total score with the total self-estimate of attitude was significant at well beyond the one per cent level.

Another section of the Junior Data Form provided for free writing about one's feelings. Respondents were asked to name one or two groups whom they had strong feelings against and describe their feelings and name one or two groups toward whom they had strong favorable feelings.

This free writing gave the best evidence of validity. Of the 513 junior students, 201 wrote that there were no groups against whom they felt strongly; in effect, they accepted all. But there were 230 who named at least 1 group toward whom they were prejudiced. The mean total attitude score of the prejudiced group (662.2) was lower than that of the acceptant (687.6), and the difference was well beyond the 1 per cent level of significance. On the other hand, the difference in mean scores of those (396) who named one or more groups especially liked and of those (62) who claimed to have no preferences (again in effect, accepting all) was negligible.

Moreover, students who expressed prejudice toward a given group differed significantly in mean total scores from those who indicated a special liking for the same group. There were only four categories in the inventory on which this could be tested, however, because of small numbers of students for comparison. These categories were: members of another race, Catholics, Jews, and upper-class people. In each case, the mean score of those expressing prejudice was the lower and well beyond the one per cent level of significance.

The third method of checking validity was that of interviewing students some weeks after they responded to the inventory. This was done in only 1 institution and with 20 students. Interviews were recorded, transcribed, and analyzed by 2 raters who--using independently a 17-point scale ranging from high acceptance to high rejection--rated each student on her attitude to each group toward whom she had seemed to indicate her feelings. The combined ratings of the two judges were used as a measure of her expressed acceptance of a given group. The individual's placement as above or below the median rating and the median score of all interviewees on each problem group was then used as a rough method of showing correlation. In the chart below, for example, may be seen the distribution of the 16 persons for whom there were ratings on attitude toward persons of a different race. Of those whose attitude ratings were low, six also had low scores, and only two were above the median. On the other hand, those whose ratings were high were equally distributed among low and high attitude scores. While the method did not give a one-to-one relationship of ratings to scores, the direction in general was one of agreement. The number used is too small to give dependable evidence of validity.

RATING

Score	Number Below Md	Number Above Md
Above Md	2	4
Below Md	6	4

Reliability of the inventory was tested by the split-half method, using the responses of the 513 juniors. This was found to be .912. Corrected for length by the Spearman-Brown formula, it was .954, which warrants interpretation of total scores for individual students.

The reliability of certain individual problems in the inventory was also determined. They were the six which involved only single categories; the other six had each included two or three subgroups. The split-half method was applied to the first 14 of the 15 statements in each problem. The Spearman-Brown corrected coefficients for these problems were quite satisfactory, though--as expected for short tests--not as high as for the total inventory. None were below .75. The respective coefficients were:

	Problem	r
I	Parents today	.754
IV	Foreign families	.783
VI	Slum families	.796
IX	A problem school	.878
X	Factory workers	.827
XI	Another race	.786

To check on the stability of scores, the test-retest method was used with a sample of 44 home economics education seniors in 1 institution. A space of two weeks separated the two administrations. The test-retest correlation of total scores was .873. The correlation for each of the 20 problems or subproblems is shown in Table 42. For over half of the categories, reliability was at least .70. In three others it was considerably lower--attitudes toward city people and toward those with either little education or with college education. Scores were most highly stable in attitudes toward the divorced, another race, and the groups involved in the problem school described in the inventory.

Evidences of validity and reliability which have been here reported, supported the use of the instrument in the longitudinal study as originally planned.

Changes in Attitudes

In the cooperative study, for 2 consecutive years (1959-1960), students beginning their junior year (7th quarter or 5th semester) as majors in home economics education in the 6 universities were tested early in the autumn. All of these students who were graduated at any time during the following year were retested in their final quarter or semester of residence which was always after their student teaching experience. Seniors who taught home economics in their first year after graduation were again retested toward the close of that school year. At each time respondents also filled out a data form. (See Appendix D for copies of Junior, Senior, and First-year Teacher Data Forms, p. 200, 209, 215.)

The data were complete for all institutions except two. In one university the second group of juniors was not tested until the middle of the year, and so had to be omitted. In another, the data for one group of teachers were lost in the mail and could not be replaced.

Table 42: TEST-RETEST RELIABILITY COEFFICIENTS FOR 44 SENIOR STUDENTS

Problem		r
IX	A problem school	.912
III-1	Divorced persons	.838
XI	Another race	.832
IV	Foreigners	.802
X	Factory workers	.786
XII-2	The aged	.783
III-2	Working mothers	.777
VII-1	Catholics	.771
VIII-2	Middle-class people	.743
I	Parents today	.726
II-3	Farm people	.716
VII-2	Jews	.699
II-2	Small town people	.696
VI	Slum families	.694
XII-1	Youth	.682
VIII-1	Upper-class people	.665
VII-3	Protestants	.627
V-1	Adults with little education	.590
V-2	Adults with college education	.486
II-1	City people	.428
	TOTAL	.873

Junior students were eligible to be retested as seniors; the range by institutions was from 61.1 to 89.0 per cent. Similarly, between 51.5 per cent and 69.2 per cent of the graduates in 5 of the universities were eligible to be tested also as first-year teachers of home economics.

Attitudes of the 513 Juniors

The juniors in the sample were largely from rural, middle-class, white and Protestant homes. Their highest mean problem score--indicating a favorable attitude--was that on attitude toward foreigners; the lowest, on attitude toward parents today, the divorced and/or working mothers, and the three-generation household. (Table 43) The range of scores in all 12 problems was wide (from 33 to 47 points), especially on attitudes toward those of another race (Problem XI), the problem school (X), and slum families (VI). The standard deviations indicate, however, that the juniors were quite a homogeneous group.

For six of the problems, subscores were obtained. For example, Problem II on communities of different sizes included statements of attitude toward families living on farms, in small towns, and in cities. The data in Table 44 and the profiles of 3 students in Figure 1 indicate that for guidance purposes it would be well to obtain attitude subscores for this problem.

The score of Student No. 8 on people of different size communities (Problem II), for example, places her slightly below the junior mean on that problem, but compared with other juniors her subscore on attitude toward city people was very low--below the 10th percentile. Similarly, Student No. 10 who was scored slightly above the junior mean on Problem II, in comparison with juniors generally, had extremely high scores on city and farm people and very low scores on those in small towns.

The three profiles, incidently, also serve to suggest the usefulness of such charts in helping students to interpret their own scores and to plan for broadening or deepening their experience with some groups. The profile of Student No. 8 (Figure 1) illustrates an inconsistent pattern; that is, one of favorable attitudes toward a problem school situation (Problem IX) where low ability, high delinquency, and disinterested parents prevail but less

Table 43: PROBLEM SCORES OF JUNIORS: MEAN, STANDARD DEVIATION, LOW AND HIGH SCORES (GIVEN IN RANK ORDER OF MEANS) (75 = HIGHEST POSSIBLE SCORE ON EACH PROBLEM)

	Subproblem	Mean	SD	Low and High Scores
IV	Foreigners	61.4	6.378	39 - 75
II	Different size communities	58.8	6.078	38 - 73
IX	A problem school	58.1	7.387	30 - 75
X	Factory workers	57.9	6.521	33 - 75
VII	Different religious groups	57.6	6.605	36 - 74
XI	Another race	57.4	6.578	28 - 75
V	Educational levels	57.3	6.070	39 - 74
VIII	Upper and middle class	55.4	6.062	40 - 73
VI	Slum families	54.8	6.633	28 - 73
XII	Three-generation household	52.6	6.187	32 - 72
III	Divorced and/or working mothers	52.2	6.392	30 - 69
I	Parents today	51.8	7.756	31 - 69
	TOTAL	675.1	51.013	504 - 826

favorable attitudes toward the persons of that community--parents today, city people, working mothers, people with little education, all religious groups, another race, and young people today.

Table 44: SUBPROBLEM SCORES OF JUNIORS: MEAN STANDARD DEVIATION, AND LOW AND HIGH SCORES

	Subproblem	Highest Score Possible	Mean	SD	Low and High Scores
II-1	City families	25	18.4	2.821	11 - 25
II-2	Town families	25	19.1	3.220	8 - 25
II-3	Farm families	25	21.3	2.623	11 - 25
III-1	Divorced persons	40	28.0	4.169	15 - 38
III-2	Working mothers	35	24.1	3.901	11 - 33
V-1	Adults with little education	45	35.3	4.483	19 - 45
V-2	Adults with college education	30	22.0	2.991	11 - 30
VII-1	Catholics	25	17.3	3.908	5 - 25
VII-2	Jews	25	20.2	2.818	11 - 25
VII-3	Protestants	25	20.1	2.330	13 - 25
VIII-1	Upper-class people	50	35.5	5.043	24 - 49
VIII-2	Middle-class people	25	19.9	2.147	15 - 25
XII-1	Youth	35	24.8	3.372	15 - 34
XII-2	The aged	40	27.8	4.296	11 - 40

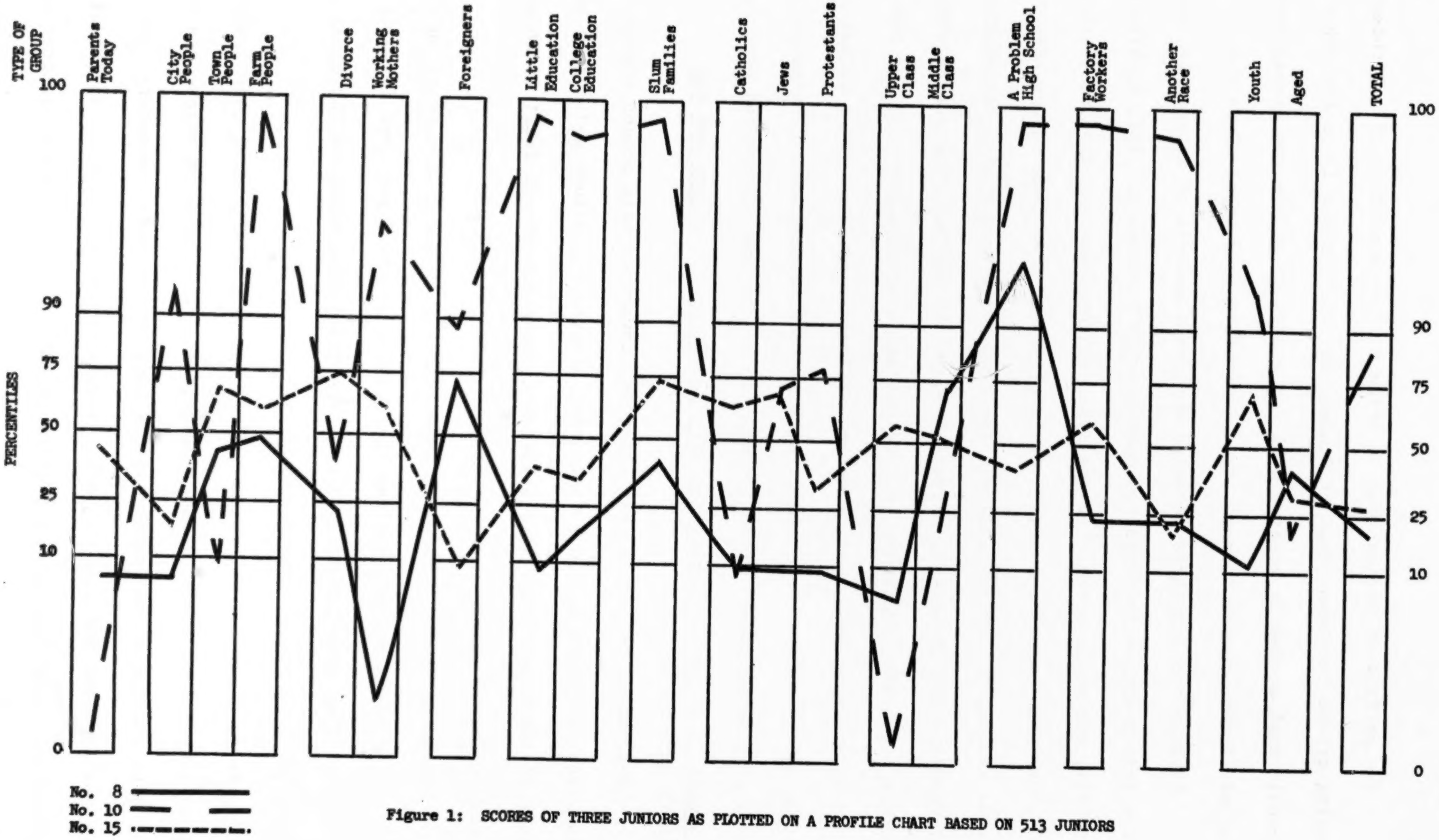

Figure 1: SCORES OF THREE JUNIORS AS PLOTTED ON A PROFILE CHART BASED ON 513 JUNIORS

The profile of Student No. 10 (Figure 1) is a picture of attitudes clustering around the mean; that of Student No. 15, (Figure 1) on the other hand, reveals high scores in general with low scores in only a few areas; such as, parents today, people in small towns, Catholics and upper-class families.

Because the subscores revealed important aspects of acceptance, the study from this point on involved the subscores in Problems II, III, V, VII, VIII, and XII, the whole scores for the other six problems and the total score.

The mean scores of juniors by institutions are given in Appendix D, Table XXXIII, p. 206, and indicate the need for a sample of 2 consecutive years of students and of several universities in the region. The mean scores varied in the two years. Moreover, in the composite of data for 1959 and 1960, the mean attitude scores of institutions differed significantly at either the 1 or 5 per cent levels on 9 of the 20 problems and subproblems. The sample was thus more heterogeneous than if one year or one institution had been taken.

Changes in Attitudes During the Last Two Years in College and the First Year of Teaching

Hypothesis No. 1 was that attitudes toward certain groups change during the last two years of the professional program in college and during the first year of teaching. That this happened to some extent--at least as these changes were reflected in inventory scores--is evident in Table 45.

The mean scores of seniors were higher than the junior means on 10 of the 20 problems and subproblems (5 of these at the 1 per cent level of significance). They were lower, however, than the junior means on the other 10 problems; on 3 of these, significantly so.

As teachers, on the other hand, respondents in general made lower scores than they did as either juniors or seniors. The cases in which this was true at both the junior and senior levels were on the total inventory, and on eight of the problems and subproblems: parents today, foreigners, adults with little education, slum families, a problem school, factory workers, another race, and youth.

Table 45: "t" VALUES OF THE DIFFERENCE IN MEAN SCORES: SENIOR AND JUNIOR, TEACHER AND JUNIOR, TEACHER AND SENIOR

Problem		"t" Value of Difference in Mean Scores		
		Senior and Junior (366)	Teacher and Junior (197)	Teacher and Senior (197)
I	Parents today	-0.58	-4.67**	-4.60**
II-1	City people	3.00**	0.07	-0.81
II-2	Town people	-2.30*	-2.41**	-1.52
II-3	Farm people	-1.50	-2.40**	-1.28
III-1	Divorced persons	4.67**	1.70	-0.92
III-2	Working mothers	7.84**	1.74	-2.60**
IV	Foreigners	-3.66**	-4.42**	-3.45**
V-1	Persons with little education	-0.41	-5.31**	-4.03**
V-2	Persons with college education	1.23	0.99	1.29
VI	Slum families	-0.19	-6.28**	-6.99**
VII-1	Catholics	0.73	-1.47	-2.03*
VII-2	Jews	0.08	0.70	1.18
VII-3	Protestants	-0.71	-1.32	-0.78
VIII-1	Upper class	4.28**	2.28*	-1.41
VIII-2	Middle class	-3.74**	-4.06**	-0.95
IX	A problem school	-0.06	-7.22**	-8.39**
X	Factory workers	-2.94**	-7.29**	-5.87**
XI	Another race	0.33	-5.13**	-3.30**
XII-1	Youth	1.86	-4.57**	-6.07**
XII-2	Old age	4.04**	2.78**	-0.48
	Total	1.29	-5.38**	-4.87**

* Significant at 5 per cent level

** Significant at 1 per cent level

Interestingly enough, however, respondents' estimates of their change in attitudes were not borne out by a corresponding change in scores. Graduating seniors had been asked to indicate on their data form whether their feelings toward any group(s) had changed since the beginning of their junior year. Teachers had been asked the same question relative to their year as a teacher. (Appendix D, Senior Data Form, p. 209, Teacher Form, P. 215.) A negligible difference was found between the mean total scores of those who said they had changed and those who indicated they had not; "t" value of the difference was only 0.62 for seniors, and 0.42 for the first-year teachers.

Even more important was the respondents' estimate of the direction of their felt change toward specific groups (Table 46). In no case was a report of favorable change supported by a significant gain in scores. In fact, teachers who said they felt more favorably toward Catholics, or toward the child who had a low IQ and/or was delinquent showed a significant loss in scores on these groups. On the other hand, when respondents said they felt less favorably toward a group, their scores did reflect this change. Seniors who said this about their attitude toward Jews, showed a loss in score approaching the five per cent level of significance; teachers who made the same statement with regard to children who were of low IQ and/or were delinquent, a loss well beyond the one per cent level.

These findings concerning respondents' estimates of change and their actual scores on the inventory--at first glance apparently inconsistent--can be logically supported, and incidentally thus give further evidence of the validity of the inventory. Thus, on the one hand, it seems reasonable that students on a liberal college campus today, trying to understand others who are different in some way from themselves, would hope that they had improved in their interpersonal attitudes, when actually no such change had taken place. In other words, it would be consistent for students, after living twenty years or so, to have some deeply rooted likes and dislikes, and in the comparatively short interval between the junior year and graduation and first-year teaching therefore not to change greatly in attitude, even though desiring to be more acceptant. On the other hand, it also seems reasonable for persons whose dislike for a group has actually increased to be much aware of this fact.

Table 46: "t" VALUES OF THE DIFFERENCE IN MEAN SCORES OF RESPONDENTS WHO STATED THAT THEY HAD BECOME MORE FAVORABLE, OR LESS FAVORABLE, TOWARD A SPECIFIC GROUP

		Reported they had become more favorable toward a group				Reported they had become less favorable toward a group			
		Senior Respondents		Teacher Respondents		Senior Respondents		Teacher Respondents	
Problem		No.	"t"	No.	"t"	No.	"t"	No.	"t"
IV	Foreigners	42	-1.20	...	...	...	...	...	...
VII-1	Catholics	30	1.69	10	-2.12	...	...	...	...
VII-2	Jews	46	-0.07	11	-0.45	11	-2.20#	...	...
VI	Slum families	19	-0.82	13	-1.31	...	...	...	...
IX	Low IQ and/or delinquent children	28	0.52	34	-4.12**	...	...	22	-4.77**
XI	Another race	70	0.70	19	-0.76	...	...	...	...
XII-1	Youth	10	-0.90	...	...	...	...	...	...
XII-2	Aged	10	0.85	...	...	...	...	...	...
VII	Religious groups other than own	12	-0.13	...	...	...	...	...	...

...Not enough cases to analyze.
#Approaches the 5 per cent level of significance.
**Significant at the 1 per cent level.

As a final check on the factor of change in attitudes, mean scores of the six universities were compared. At each of the three testing periods, differences were found among them (Table 47). At the junior level, mean scores of the schools varied significantly on eight problems. By graduation the variation was more marked, being significant on 11 of the 20 problems and also on the total score. The greatest homogeneity was found among the first-year teachers. Here on only five of the problems was there a significant variance.

Table 47: VARIATION IN MEAN SCORES AMONG THE SIX UNIVERSITIES: F-VALUE OF THE VARIANCE COMPUTED AT JUNIOR, SENIOR, AND FIRST-YEAR TEACHER LEVELS

	Problem	F-Value at Three Levels		
		Junior (513)	Senior (366)	First-year teacher (197)
I	Parents today	2.98*	3.37**	3.51**
II-1	City people	4.17**	2.59*	4.25**
II-2	Town people	4.18**	1.46	0.33
II-3	Farm people	4.84**	0.82	1.60
III-1	Divorced persons	1.55	2.75*	1.26
III-2	Working mothers	3.22	3.35**	0.60
IV	Foreigners	1.17	1.71	1.63
V-1	Persons with little education	1.87	6.15**	1.53
V-2	Persons with college education	3.11*	7.64**	2.49*
VI	Slum families	1.72	1.49	1.48
VII-1	Catholics	2.82*	4.55**	1.35
VII-2	Jews	6.32**	5.53**	1.02
VII-3	Protestants	2.13	0.93	0.88
VIII-1	Upper class	6.62**	3.64**	2.92*
VIII-2	Middle class	1.41	1.18	1.97
IX	A problem school	1.78	1.01	0.81
X	Factory workers	0.17	0.83	0.49
XI	Another race	0.88	3.24**	0.79
XII-1	Youth	1.72	0.33	3.78**
XII-2	Old age	1.97	3.18**	1.23
	TOTAL	1.05	2.33*	1.64

*Significant at 5 per cent level
**Significant at 1 per cent level

In summary then, Hypothesis 1 was supported in that change in attitude scores was found at the different testing periods. However, these changes were not consistently in the direction of greater acceptance, nor did they always correspond with seniors' and teachers' beliefs regarding change in their attitudes. Differences in means among the several universities increased while students were in school, but lessened during the first year of teaching.

Factors Associated With Attitudes

The second major hypothesis was that attitude scores would be associated with certain factors:

1. The socioeconomic background of students
2. Different aspects of experience with the groups involved in the inventory
3. Certain elements in the school situation where the teacher was employed.

Socioeconomic Background as a Factor

Certain socioeconomic data--size of respondent's home community, the mean educational level of parents, and the father's occupation--were used in testing the first subhypothesis. Their relationship to scores was studied by means of analysis of variance using data for the 513 juniors in the study.

None of these factors was found to be significantly related to the total score, thus refuting the hypothesis to this extent. On the other hand, the hypothesis was partially supported by the significant association of: (a) size of respondent's home community with mean scores on 8 of the 20 problems and subproblems; (b) parents' education, with scores on 4 problems; and (c) father's occupation, with scores on 3. (See Table 48)

Inspection of working tables not given, however, shows that these significant associations are to be expected. For example, students who came from a community of a certain size had a higher mean score on the inventory problem dealing with that type of community than did those from other communities. The association of mean scores by community size is summarized here, since it is not shown in the table.

Students from farms scored:

Lower than others in attitude toward:	Higher than others in attitude toward:
- city people	- farm people
- college educated and professional persons	- people of small towns (as did the town girls, also)
- Catholics	
- the aged	

Students from very large cities scored:

Lower than others in their attitude toward:	Higher than others in their attitude toward:
- people of small towns	- city people
- farm people	- Jews
	- upper-class people

Students from small towns had the higher attitude scores toward:

- Catholics
- college educated and professional people

Similarly, the association of some mean scores with the factor of parents' education was rather obvious. Students whose parents were college graduates had higher mean scores on attitude toward persons living in cities, persons of the upper class, and the aged. Lower mean scores on attitude toward city people, the divorced and the aged were made by those whose parents had attended high school but had not graduated. Students whose parents had attended or graduated from high school had the lower mean score on the statements relating to the upper class. High school graduation by parents was associated with the more liberal mean score on divorce.

The father's occupation as a factor also seems consistently related to certain mean scores. Students whose fathers were professional men had less favorable attitudes toward small town and farm people; those involved in farming, the higher scores. Daughters of farmers scored lower than those of skilled and unskilled workers on statements relating to Catholics.

Table 48: JUNIOR SCORES WHICH WERE SIGNIFICANTLY RELATED TO CERTAIN FACTORS OF SOCIOECONOMICS BACKGROUND: SIZE OF HOME COMMUNITY, PARENTS' EDUCATION, FATHER'S OCCUPATION

		Significant F-Values for Certain Factors		
	Problem	Size of home community	Parents' education	Father's occupation
II-1	City people	4.321**	2.952*	...
II-2	Town people	15.942**	...	2.882**
II-3	Farm people	7.909	...	4.536**
III-1	Divorced persons	...	3.130*	...
V-2	Adults with college education	2.579*	...	...
VII-1	Catholics	3.061*	...	2.071*
VII-2	Jews	3.934**	...	...
VIII-1	Upper class	2.981*	3.140**	...
XII-2	The aged	2.672*	3.134*	...

...F-Value not significant, and so not reported
*Significant at 5 per cent level
**Significant at 1 per cent level

Possibly the lack of a clear-cut picture of association between socioeconomic factors and scores is related to the students tested as juniors. In two years on a college campus they might have overcome to some extent the effects of home background on attitudes.

The realtionship of socioeconomic factors to scores was tested also at the first-year teacher level. On the assumption that differences between the teacher's home community and that where she is teaching may well affect the degree to which she accepts other groups, the first-year teacher was asked on the Teacher Data Form to give information about these two places.

She indicated for each community:

1. data on population
2. information on seven other characteristics; such as, socioeconomic classes, occupations, races, religious groups outstanding in the community.
3. her estimate of the discipline of children in the homes of the community, and her estimate of the interest shown by parents in the school.

The total score on the inventory was not found to be significantly associated with any of these three factors on which the home and school communities were compared. However, there was a strong tendency in the case of parental discipline and interest in the school which cannot be ignored. Mean total scores tended to be lowest for the group of teachers who estimated this factor to be lower where they were teaching than in the home community; and highest, for those who estimated it to be higher in the school community. This trend was noted for the problem scores as well as for the total. Incidentally, the loss in mean total score between the senior and teacher years was significantly greater for those teachers who said that parental discipline and interest in the school were lower in the teaching community than at home. There was the least loss in mean scores when communities were reported as being the same on this factor.

To summarize then, the hypothesis that mean scores would be significantly associated with selected factors of socioeconomic background was refuted for total scores at the junior level, but partially supported for certain problem and subproblem scores. Similarly, the added hypothesis that total mean scores of first-year teachers would be significantly related to certain differences between their home and school communities was refuted. However, there was strong evidence that teachers' estimate of the school community as inferior to the home community in parental discipline and interest in the school was related to a loss in teacher scores as compared with senior scores on both the total inventory and on individual problems.

Experience as a Factor

If it is true that experience plays a major part in establishing and in changing one's values and attitudes, then the college needs to learn what aspects of experience are especially important for these purposes. In the case of acceptance of groups unlike one's own; for example, is it a matter of *knowing* such groups? Is it the *degree* of acquaintance? Is it the *pleasantness of experience*, or is it the *variety of experiences* which one has had with them? Is it the *type of experience* which is associated with attitude scores? The second subhypothesis was that scores would be associated with these five aspects of experience with the groups represented in the inventory.

Most of these questions were studied at all three stages of the longitudinal study. The juniors were asked to indicate on their Data Form any experiences previous to their junior year, which they believed had helped them understand some group or groups different from their own. As seniors, on the other hand, they were to consider only experiences of their last two years in college; and as teachers, only those which they had had during their first year of teaching home economics.

The extent to which persons at each stage reported that they *knew one or more groups unlike their own*, and how this was related to total scores on the inventory is shown in Table 49. There was a highly significant difference between scores of juniors who had known such groups and those who had not, knowledge of groups being associated with the higher mean score. In the case of seniors and first-year teachers, however, there was no such association. These findings might well be due to differences in time span in the three data forms. Thus, juniors had responded in terms of the previous 15 or 20 years. Seniors and first-year teachers, on the other hand, had not had enough time to extend their knowledge of different groups (unless the University or supervisors had deliberately directed their attention to the question), nor was there enough time for great changes in attitudes to occur.

Table 49: MEAN SCORES OF JUNIORS, SENIORS, AND FIRST-YEAR TEACHERS WHO KNEW AND WHO DID NOT KNOW GROUPS DIFFERENT FROM THEIR OWN

Students and Teachers	Knew Other Groups		Did Not Know Other Groups		"t"
	No.	Mean Score	No.	Mean Score	
Juniors	431	678.6	82	656.7	3.587**
Seniors	309	678.71	51	671.76	0.89
First-year teachers	135	658.45	61	654.56	0.43

**Significant at 1 per cent level

The degree of acquaintance with the groups involved in the inventory was secured only for seniors. On the Senior Data Form, the groups were listed and the respondent asked to indicate how well she knew each of them. She used a code which ranged from zero ("know no one in the group") to a rating of four ("have more than three friends in the group"). The sum of these figures was her total "acquaintance rating".

There was a positive association of the acquaintance rating with attitude scores on only four groups: working mothers, slum families, a problem school (all at the one per cent level of significance), and persons with little education (at the five per cent level). A negative association was found with scores on parents today (at the five per cent level). The fact that greater acquaintance was not more generally associated with higher scores was rather disappointing, but might well be due to a fault in the rating instrument. It is possible that the highest rating of acquaintance permitted by the scale--"have more than three friends in that group"--was not high enough to identify those respondents who had broad acquaintance.

The relation of scores on the inventory to the degree of pleasantness of experience which juniors reported with the various groups was studied only in the 1959 sample of 283 students. A total "pleasantness rating" was secured from the Junior Data Form, where students indicated by code, for each group which they knew, whether their experience had been pleasant or unpleasant. The association of inventory scores with pleasantness rating was studied by means of the chi-square test, using only the 50 high scoring and 50 low scoring students. (See Appendix D, Table XXXIV, p. 221.) A relationship significant at the 1 per cent level was found for the total inventory and for 11 of the 20 problems or subproblems; a relationship at the 5 per cent level of significance, for 3 others. In other words, experience which had been pleasant tended to be associated with high scores of these juniors.

In the case of seniors, inquiry concerning pleasantness of experience with the various groups involved in the inventory was similarly made relating to the last two years of college. Responses of the 366 seniors were studied, but no significant relationships were found.

The question of quality of experience was approached in a different manner with the first-year teachers. A list of types of pupils (those from upper-, middle-, and lower-class families, pupils with low IQ, high IQ, pupils whose mothers work, and so on.), incorporating most of the groups considered in the inventory, was presented. (Appendix D, Teacher Data Form, p. 215.) The respondent first indicated those with whom she had no contact during this first year of teaching. Then she rated the others in terms of the degree of satisfaction she had experienced in working with them. The sum of these ratings divided by the number with whom she had contact yielded her mean satisfaction rating.

This rating was associated with the total inventory score at well beyond the one per cent level of significance. In addition most of the problem scores were also significantly associated with this mean rating (Table 50). Apparently the teacher who found satisfaction in the day-to-day contacts with pupils tended also to be the one who scored higher on the various parts of the inventory.

Table 50: SCORES SIGNIFICANTLY ASSOCIATED WITH MEAN RATINGS ON SATISFACTION FOUND IN WORKING WITH DIFFERENT TYPES OF PUPILS

	Problem	"t"
I	Parents today	3.04**
II-1	City people	3.07**
III-1	Divorced persons	2.11*
III-2	Working mothers	2.59**
IV	Foreigners	3.12**
V-1	Adults with little education	3.69**
VI	Slum families	5.53**
VII-1	Catholics	2.12*
VII-2	Jews	2.47*
VIII-1	Upper-class people	2.93**
VIII-2	Middle-class people	3.64**
IX	A problem school	5.09**
X	Factory workers	3.79**
XI	Persons of another race	3.72**
XII-1	Youth	4.02**
XII-2	The aged	2.79**
	TOTAL SCORE	5.48**

*Significant at the 5 per cent level
**Significant at the 1 per cent level

An estimate of variety in experience was made by summing the number of different kinds of experience which the respondents indicated had helped them in understanding groups different from their own. The data form for juniors included a list of 20 kinds of experience; the senior form 21; and the teacher form 15. In each case opportunity was given for adding other experiences not named. In only the teacher group was there a significant relationship (and at the one per cent level) between number of experience types reported and the total inventory score.

Exploration of the relation of scores to the specific types of experience, which students on their Data Forms reported had been helpful in their understanding of groups unlike their own, was quite revealing, although for the inventory as a whole, only a few types stood out as associated with scores and these were at the five per cent level of significance. (Upper section of

Table 51.) In the case of juniors, church and/or Sunday School activities were associated with higher scores; in the case of seniors, it was the making of home visits. Field trips reported by seniors were, however, associated with lower scores on the total inventory. No experiences reported by first-year teachers were significantly related to scores at either the one or five per cent level.

More interesting and, in some cases, challenging patterns of association were revealed by making a composite of the data by problems and subproblems. This was done by counting the problem groups in which association of a given experience with a problem score was significant at either the 1, 5, 10 or 20 per cent levels. The resulting patterns are shown in the lower section of Table 51.

In the case of juniors, certain general experiences were related to high scores: these were day-to-day association with other students, church and/or Sunday School activities, studying about other groups in college classes, and observation in the schools. On the other hand, class-related outside experiences (except for observation), and work experiences--both of which are commonly considered to be of value in the preparation of teachers--were associated with the lower scores.

Certain experiences during the last two years in college were associated with higher senior scores. These were the making of home visits--an experience usually provided in the preparation of home economics teachers--and working in organizations. In contrast to juniors, most kinds of work experience also fell in this category. Working in another's home, however, as was the case with juniors, was associated with lower scores. This was true also of travel and most class-related outside experiences, especially student teaching and observation-participation. The latter finding is disappointing.

Table 51: EXPERIENCES AT DIFFERENT LEVELS: (1) WHICH WERE SIGNIFICANTLY ASSOCIATED WITH TOTAL SCORES OR (2) WHICH INDICATED TRENDS IN ASSOCIATION WITH INDIVIDUAL PROBLEM SCORES

Junior Students		Senior Students		First-Year Teachers.	
High Score	Low Score	High Score	Low Score	High Score	Low Score
EXPERIENCES SIGNIFICANTLY ASSOCIATED WITH TOTAL SCORES					
Activities in church and/or Sunday School*	...	Class related outside experience - home visits*	Class related outside experience - field trips*	...	...
EXPERIENCES INDICATING TRENDS IN ASSOCIATION WITH PROBLEM SCORES					
Class related outside experience: -observation and participation Day-to-day association with other groups in college classes Church and/or Sunday School activities	All class related outside experiences (except observation) All work experiences, but especially: -in another's home -as a camp leader -in social service agencies -in store, office factory	Class related outside experience: -home visits Work experiences: -most kinds except work in another's home Studying about other groups in college classes Working in organizations Church and/or Sunday School activities	Class related outside experiences: -field trips -student teaching Work experience: -in another's home Travel	Working in organizations Dating someone from another group Entertaining parents in home economics department	Casual contacts with parents in community Seeing pupils in situations outside of school

*Significant at the 5 per cent level
...None were significant

It may be the result of the placement of students for their professional experience in schools where few of the groups represented in the inventory are found; or it may be due to lack of depth in experience with groups provided by the schools.

The first-year teachers showed fewer types of association between scores and experience than did the juniors and seniors. Only working in organizations, dating, and entertaining parents in the home economics department tended to be related to the higher attitude scores. However, casual contacts with parents in the community, and seeing pupils in situations outside of school--both of which if frequent would seem to be rich in opportunities for understanding people of the community--tended to be associated with lower scores. It may be that this absence of association with scores reflects a lack of opportunity in the community served by first-year teachers to know many different kinds of groups.

Such were the patterns of association of scores and experience. But there was some difference among the universities in the extent to which students reported certain experiences as promoting their understanding of groups different from their own.

In Table 52 are shown those experiences which at least half of the juniors, seniors, and teachers from the different universities reported as having helped them know such groups. In some cases, as shown in the table, this proportion was found in only four of the institutions; in other cases, in five or six. The greatest number of experiences was found at the junior and senior levels and many of them were common to both groups. The first-year teachers, however, reported only two kinds of activities which were experienced by as many as half of them and these were the two mentioned earlier as showing a trend toward negative association with test scores.

Table 52: EXPERIENCES WHICH AT LEAST HALF OF THE JUNIORS, SENIORS, OR TEACHERS FROM FOUR OR MORE OF THE DIFFERENT UNIVERSITIES REPORTED AS HAVING HELPED THEM KNOW GROUPS DIFFERENT FROM THEIR OWN

Juniors	Seniors	First-year Teachers
Visiting friends (5)*	Visiting friends (4)	Casual contacts with parents in stores, public transportation, meetings, etc. (4)
Knowing students in college classes (6)	Knowing students in college classes (6)	Seeing pupils in situations outside of school (4)
Working in organizations (6)	Working in organizations (5)	
Reading newspspers, magazines (4)	Reading newspapers, magazines (5)	
Experiences in dormitory or rooming house (6)	Experiences in dormitory or rooming house (6)	
Studying about other groups in college classes (4)	Studying about other groups in college classes (5)	
Activities in church and/or Sunday School (4)	Observation and participation in the schools (6)	
Club experiences in high school (4)	Student teaching (6)	
Seeing movies and television (4)		

*Number in parentheses indicates the number of universities in which at least half of the students checked a given experience as having helped them understand groups different from their own.

In summary then, the subhypothesis that attitude scores are significantly associated with experience was in general supported by the data. Knowing different groups represented in the inventory was associated with high scores of juniors, so also was pleasantness of experience associated with these groups. Satisfaction in working with pupils of different types was associated to a high degree with first-year teachers' scores. Specific types of experience, while significant at varying levels (from 1 to 20 per cent), did show important trends in association, and differed at the 3 stages of the study. Degree of acquaintance with groups--as tested with seniors--was not significantly associated with scores. The number of types of experience checked as having been helpful in understanding groups other than one's own was significant at only the first-year teacher level.

Certain Elements in the School Situation as a Factor

The third subhypothesis was that inventory scores would be significantly associated with the teacher's attitude toward her school situation and toward teaching. The last page of the Teacher Data Form was designed to test this hypothesis. (Appendix D. p. 220 .) The teacher was presented with several five-point check-lists and asked to indicate certain characteristics of her school situation: whether discipline had been a problem for her, what the general attitude of the administration and faculty in her school had been toward home economics, and what her estimate was of the mental ability of students in her classes. She was to check also the statements which best described how she really felt about teaching most of the time as well as how she felt about working with young people. Values from one to five were assigned the responses to obtain a rating for each characteristic.

The association between each of these ratings and total score on the inventory was positive and significant (Table 53). In other words the higher the teacher's total score on the inventory, the more favorable were her attitude ratings toward teaching and toward working with young people, the more favorable she found the administration and faculty toward home economics, the more she believed she was getting the abler students in her home economics classes and the less frequently she reported discipline as a problem to her.

Summary and Implications

The Study

This chapter reports a longitudinal study of the degree to which students preparing to teach home economics, and later as first-year teachers, accept persons and groups like and unlike themselves. Data were collected from six universities in the Central Region: the Universities of Illinois, Minnesota, Missouri, and Iowa, Michigan and Ohio State Universities.

Table 53: "t" VALUES OF THE RELATIONSHIP OF TOTAL INVENTORY SCORE TO CERTAIN ELEMENTS IN THE SCHOOL SITUATION

Elements in school situation	"t"
Degree to which discipline had been a problem	2.30*
Teacher's report of attitude of administration and faculty toward home economics	3.25**
Teacher's estimate of mental ability of pupils in her classes	4.19**
Teacher's attitude toward teaching most of the time	4.99**
Teacher's attitude toward working with young people	2.00*

Students were tested at the beginning of their junior year as home economics education majors, again in the last quarter or semester of their senior year, and finally near the close of their first year of teaching home economics. The numbers involved in these 3 testings were 513, 366, and 197 respectively.

The instrument used was an attitude inventory developed for the study and called in its present form, The Teacher and the Community. It consists of 12 problems, which sample attitudes toward 20 groups and subgroups, such as parents today, youth, socioeconomic groups, and minority groups.

The split-half reliability of the inventory was determined from the responses of the 513 juniors and found to be .954 when corrected for length by the Spearman-Brown formula. The test-retest reliability, using 44 seniors in 1 institution, was .873.

Face validity of the inventory was provided in its construction. This involved first the collection of attitude statements from a large number of college men and women, home economics and nonhome economics majors. Statements were then classified by the Cooperative Committee first as being favorable or unfavorable statements, and later as signifying an acceptant or nonacceptant person. Finally, statements for the experimental form were selected from those which discriminated best between criterion groups of acceptant and nonacceptant home economics teachers.

Validity of response was tested and established to some degree in the study of juniors by students' estimates of their feelings toward specific groups, by interviews with a sample of students in one institution, and by analysis of free writing concerning those groups toward whom students revealed strongly favorable or unfavorable attitudes.

The general hypotheses tested in the study were: 1. *that attitudes toward groups will change in the time represented in a longitudinal study, specifically, during the last two years of college, and the first year of teaching*; 2. *that certain factors of socioeconomic background and of experience with groups and certain elements in the school situation will be significantly related to attitudes*.

Change in Attitudes

The first hypothesis--that change in attitudes will occur--was borne out by the findings. This change, however, was not always in the direction one would expect to be associated with greater maturity; in general the change was a loss in scores. The seniors showed a significant gain over junior scores on five problem groups, but there was a loss on four others. The teachers made a significant gain over junior scores on only 2 groups; a loss, on 11 others and on the total score. The teachers changed significantly from senior scores on ten groups and on the total score, but all of these represented a loss.

Certain problem groups stand out as worthy of notice. Perhaps most important are those in which there was a consistently significant loss in first-year teacher scores as compared with scores at either the junior or the senior level. These groups were: parents today, foreigners, persons with little education, slum families, factory workers, another race, persons involved in the problem school described in the inventory, and youth. These would all seem to be groups which a teacher employed in today's schools should accept, if they are to be more effective teachers.

Interestingly enough, at both senior and first-year teacher levels, the respondent's belief that she had become more favorable in attitude toward a specific group was not borne out by scores on that group. On the other hand, a belief that she was less acceptant was corroborated by scores.

Finally, mean scores on the total inventory and the 20 problem groups varied by institutions. This was most noticeable at the senior level. The smallest differences in the scores by schools were obtained for first-year teachers.

What are the implications of these findings on change? They seem to fall into at least three categories: implications concerning the students who enter the teaching field, implications for the teacher education program, implications concerning the teacher in her first job.

Certain questions relate especially to the students who become teachers. The data suggest--as did the MTAI study reported earlier--that undergraduates may characteristically hold more idealistic attitudes than they will have after leaving college. They suggest also that it is difficult to estimate one's own change in attitudes, particularly if he is making a conscious effort to become more objective toward individuals and groups and more understanding of them.

As far as the teacher education program is concerned, the data suggest that home economics students in that program may not be given sufficient opportunities to know and understand the many groups involved in the inventory. In fact they suggest that current student experiences--as in observation and student teaching--may be carried on in situations too unlike those into which they will go later as teachers. Furthermore, one wonders whether there may not be a campus or state "climate" that accounts for differences in attitudes found among institutions.

At least one implication relates to the teacher in her first teaching position. When the new teacher comes up against the realities of the public school for the first time, the result may well be at least a temporary shift in attitudes. The question is: Has the school administrator or the supervisor some responsibility for promoting the development of the teacher in this respect?

Factors Associated With Attitudes

The socioeconomic factors of size of home community, level of parents' education, and father's occupation in general showed only the more obvious relationships to some of the junior problem scores.

On the other hand, there was a tendency for teachers' scores to be related to certain differences in their home and school communities, at least as they saw them. Teachers who believed that parental discipline and interest in the school community were lower than in their home town tended to have the lower problem and total scores. Conversely, if they considered these factors to be higher in the school community, their attitude scores were accordingly higher. If they considered the two communities similar, their scores fell between those of the other two groups.

The relation of experiences to attitude scores was considered in several ways. Those experience factors which showed most significant association with scores were:

1. At the junior level, the experience of knowing or not knowing groups different from one's own.

2. At the teacher level, the degree of satisfaction which teachers found in working with different types of pupils.

3. At all three levels, certain specific types of experience.

Particularly important for the teacher education program were these experiences:

a. At the junior level, observation and participation in the schools (associated with higher scores); and other class related outside experiences and most work experiences (both associated with lower scores).

b. At the senior level, home visits and most work experiences (higher scores); and student teaching and working in another's home (lower scores).

c. At the teacher level, casual contacts with parents in the community and seeing pupils in situations outside of school (both associated with lower scores).

The relation of certain elements in the school situation to teachers' attitude scores was the final type of association tested. This association was positive and significant. Teachers who had little trouble with discipline, who believed that the administration and faculty were favorable in their attitude toward home economics, and who said they tended to have the abler students in their classes scored higher than did other teachers. It is not surprising then that the higher the teacher's total score on the inventory, the more favorable were her attitude ratings toward teaching and toward working with young people.

What are the implications of all these findings on factors related to attitudes? One important question centers on a point of research technique. Community size, parents' educational level, and fathers's occupation are time-honored criteria for assessing socioeconomic background. Yet in this study they are disappointing in their lack of clear-cut association with attitudes. Another approach may be more fruitful. Interviews with students and comments made in a junior seminar not here reported both lend credence to the hypothesis that instead it is evidence of the early "values-environment"--the home and community setting in which attitudes and values are nurtured--which is needed in any study of attitudes. By this is meant evidence of parents' own attitudes, rather than educational level; evidence of the acceptance-rejection "climate" of the church and school, rather than community size.

Other implications are more specifically related to the teacher education program. Since attitudes toward parents today--particularly in relation to discipline in the home and their interest in the school--proved to be important, the program might well give more emphasis to the understanding of parents and the problems they have in rearing children today in our urban society. The relation of certain experiences to attitudes and attitude formation would point toward enrichment of the entire preservice program in this respect. This would mean emphasis on knowing many groups, on discovering satisfactions in working with pupils from different backgrounds, on broadening and deepening student experience with groups, and on making that experience meaningful in relation to the role of the teacher.

It would mean also a new emphasis on the school-community. The findings point to the teacher's need for knowing the community. In the minds of some, there may even be a question as to whether a school-community actually exists in these days of large city schools and their rural counterpart, the large consolidated school. If it does not exist, how can the teacher really come to know her pupils and their families? If she cannot do this, what becomes of our concept of the teacher as one who greatly influences lives?

Many of these findings suggest additional studies which might well be made. They are considered in the final chapter.

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Chapter V

GENERAL CONCLUSIONS AND IMPLICATIONS FROM THE STUDY

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The cooperative research planned and carried through by representatives of six institutions (seven in the first study) in six North-Central States was predicated on a belief that effective teachers of home economics in America's public schools should not only understand the sciences and arts and their application to home living in present day society, understand the place of the schools and education in the United States, but also have favorable attitudes toward teaching, toward pupils, and toward families and groups different from their own. Equally potent was the belief that the college can and should help students develop these attitudes and interests as a part of their preparation that they persist in affecting their teaching.

The procedure followed in this cooperative study was that of having the research worker in each of three institutions carry responsibility for one phase of the study with other members of the cooperative group assisting at each stage in planning the study, developing forms for collecting data, giving the inventories and accompanying data sheets to students and teachers, and deciding on kinds of analyses of findings to be made and reports to issue.

The Cooperative Aspects

As a cooperative research project, the experience brought professional stiumlation and encouraged creative thinking among members of the group by bringing to bear on the decisions to be made viewpoints of participants and consultants with different backgrounds and experience. Through cooperation the scope of the investigation was extended beyond that which would have been practical for an individual researcher by involving a large number of subjects and by intensive study of three closely related but specific characteristics. The longitudinal phase of the study made it possible to determine whether changes were occurring and at the same time enabled the group to analyze the current situation with students at different stages of their development in the several institutions and with first-year teachers. In addition, data on attitudes toward children were secured from experienced teachers in the six states.

Difficulties arose because of shortage of personnel and funds. Participants were teaching as well as doing research. Part of the time graduate assistants could not be found. Only three institutions carried through the final stage of the longitudinal teacher study of attitudes toward children and several colleges collecting data on freshmen and seniors failed to submit information on professional interest of these students as teachers. Persons carrying responsibility in two of the institutions changed during the period of the study thus slowing progress and limiting phases studied.

In spite of the difficulties, the group engaging in this research felt the progress made and the professional stimulation were sufficient to induce them to urge their colleagues in these and other states to undertake cooperative research.

The Instruments Used

The instruments used to gather data were directed toward important goals for teachers of home economics, and indeed, for all teachers. The Minnesota Teacher Attitude Inventory dealing with attitudes of teachers toward children had been developed with elementary school teachers and many of the items were more typical of elementary school than secondary school situations. However, because attitude toward children is such an important characteristic for home economics teachers and because the reliability of the MTAI with other teachers had been established, it served one important purpose of this study. Further research is necessary to determine whether an inventory constructed primarily for secondary school teachers or primarily for home economics teachers would be a more valid and reliable means of determining attitudes toward children of such students and teachers as were involved in this investigation.

The Johnson Home Economics Interest Inventory had been found to be a valid and reliable means of indicating interest of those in 14 home economics professions. When used with 300 students, it had a reliability coefficient of .80 on odd and even scores. The longitudinal study was concerned with home economics students who became teachers. Further investigation of its predictive value with students contemplating the other professions might well be a valuable supplement to this study of prospective and first-year teachers.

Developing an instrument to determine attitudes of students and teachers toward families and groups different from their own proved to be time consuming. For that reason the longitudinal study of this characteristic had to begin with juniors rather than with freshmen, as in the study of the other two characteristics. A study of freshmen, as well as junior students and factors associated with their acceptance or nonacceptance, would be particularly helpful to college teachers concerned with starting early in the four-year program to help students become more accepting individuals.

Several of the factors involving background and experiences of students and teachers which had been hypothesized as associated with the characteristics studied were found not to be significantly related to these attitudes and interest. Further research could well focus on determining whether other factors would be sufficiently related to serve as guides to those teacher educators and supervisors who want to help students and teachers develop these important characteristics.

Attitudes Toward Children

Most of the information from the Minnesota Teacher Attitude Inventory (MTAI) is given in Chapter II as mean scores of groups being studied. These means, though not indicating individual differences and not consistently significant, reveal several trends which are suggestive to those concerned with the preservice and inservice education of teachers.

Considering first the study of 1939 teachers inservice in the six states, the significant differences in teachers' mean scores among states and among graduates of different institutions raise important questions regarding why these differences exist. Would further study reveal types of preservice programs and kinds of inservice education which result in more favorable attitudes toward children? Can more favorable attitudes toward children be developed among all home economics teachers? The size of the standard deviations in each state also suggests that one might find it helpful to try to locate possible casual factors resulting in the wide differences among individual teachers.

The significant differences between means in schools of different sizes, with attitudes toward children better in middle-sized schools (16-75 staff members) as contrasted with smaller and larger schools, and the tendency for teachers in vocational programs to have higher mean scores than those in nonvocational programs make one wonder whether teachers in middle-sized schools and those in vocational programs had more satisfactory supervision. The later study in Minnesota and the sub-study in Ohio did not find this same relation of mean scores to middle-sized schools. This factor of size of school and type of program is important for further study. If supervisors gave special help to teachers in small schools and in nonvocational departments, would this improve their attitudes toward children or are there other factors; such as, poor equipment or inadequate supplies, or the placement of less accepting teachers in these situations involved?

The Ohio Study of teachers-in-service (see p. 51-56) also suggests 3 possible factors which may be affecting teachers' attitudes toward children. Could supervision directed toward this characteristic improve attitudes of older teachers, teachers in large cities, teachers with the more heterogeneous groups of pupils? Would a further study of these factors substantiate these as potent factors in attitudes toward children? The tendency for higher mean scores to be found among teachers who have had constructive (desirable) help from supervisors and principals should be encouraging to these leaders and a stimulus to check further their methods of supervision.

The higher mean scores of teachers who had recent college study should prove a stimulus to higher institutions to offer opportunities for study to teachers-in-service and encourage school administrators to urge teachers to avail themselves of these opportunities. A more intensive study of the relation between what the college provides for teachers-in-service and attitudes toward children might be a valuable study.

Because teachers who spent no time in working with Future Homemakers of America in home visits and in counseling tend to have lower mean scores than those who engage in these activities, it would seem that it would be well to encourage such activities. Will further research show that these means of getting better acquainted with youth also improve their attitudes toward them? Evidence in this study was based on amount of time spent. What is the relation to other factors in the experience?

The lack of relationship between mean scores and some of the previous experiences of freshmen and seniors, as well as teachers, tends to explode the theory that experience as such will be a significant factor. Further research may well be directed toward trying to find what besides mere participation or amount of time spent in an experience is vital. Is it the purpose the individual has in mind? Is it some special quality in the experience?

Both the special study of Minnesota teachers (see p. 57-60) and Ohio teachers (see p. 51-56) indicate the need for special study being given to teachers with 20 or more years of experience. What possibilities exist for creating more favorable attitudes toward children through further college study, through special kinds of supervisory assistance, through changes in sizes of classes or in facilities for teaching all aspects of home economics?

Among the supervisory devices that seem to show promise of improving attitudes toward children are: 1. providing opportunities for teachers not only to attend but also to share in conference, institute and workshop programs, whether these are for home economics teachers only or for local groups of teachers; 2. helping teachers become aware of problems, and helping them find ways to solve problems.

The longitudinal study was planned to make possible investigation of attitudes toward children of the same individuals over a five-year period. The differences in mean scores of freshmen students in different institutions could well have further study. It is clear that type of institution--land-grant college, university or teachers college--is not necessarily a factor, but a research would be tempted to give the MTAI to other freshmen in institutions with the higher mean scores and in those institutions with the lower or lowest mean scores to see if similar differences between institutions were found and, if so, study these institutions more intensively to try to locate other factors which account for differences.

The failure to find significant differences between mean scores of juniors and of these students as seniors raises important questions about why the last two college years did not seem to make a significant contribution in attitudes toward children. For prospective teachers one would assume that these years would have been especially helpful. A pilot study or action research to determine how attitudes toward children might be improved in the last two years of college would be of interest.

Because data are given for scores of only 68 students as freshmen, seniors and first-year teachers, one cannot be sure similar results would be found with greater numbers, though the improved scores from freshmen to senior years is as encouraging as the drop in mean scores during the first year of teaching is discouraging. In Chapter II, several questions are raised about the relation of scores of students to factors studied. Are many so-called experiences simply activities rather than learning experiences? Do college courses dealing with children and the family actually have as an objective improving attitudes toward children? If so, is this an objective of the teacher and not the students? Are teaching procedures consistent with the objective? Are precollegiate, collegiate and postcollegiate teachers and leaders helping prospective and inservice teachers see the learning possibilities inherent in out-of-class activities?

The consistent drop in mean scores of first-year teachers from scores of these individuals as seniors is a problem of real concern to educators. Is this less favorable attitude a normal part of the adjustments which must be made in the first year of teaching? Would it be possible to provide the kind of experiences in teaching before graduation to insure greater continuation of favorable attitudes toward children when on the job? What kinds of assistance might supervisors and school administrators give teachers to help them retain their more favorable attitudes toward children? Further study of such questions as these is highly desirable. The sub-study made of 48 teachers whose scores dropped as much as 50 points reported on p. 41-43 is one means of studying this question. Repeating such a study or devising other studies is worth the special consideration of researchers.

Professional Interest in Teaching

For those who are concerned with the preparation of home economics teachers, it is encouraging to find that interest in teaching is stable from freshman to senior year and, in contrast to attitudes toward children, does not decrease during the first year of teaching. This investigation covered only the first-year teachers, and determining whether that interest would continue for several years awaits another study. The personnel in this longitudinal study were all from state universities. Whether interest in teaching would be equally or more stable for graduates of other types of institutions could well be investigated further.

The effort to locate factors related to interest in teaching was not successful for freshmen and seniors, perhaps because here, too, items tended to focus on less significant conditions in the school and on amount of experience rather than on other qualities of the experience which need study. Motives for teaching differed from very practical considerations to desire to work with people or interest in pursuing a broad curriculum. Most of the respondents in this study indicated a long-time interest in teaching, though whether this meant since junior high school or before finishing senior high school, as has been found in some other studies, was not determined. Further research to test the relation of interest in teaching home economics to other factors than those studied might well reveal important ones which high school teachers, college staff members and supervisors would find significant.

Acceptance of Differences

The attitudes of students and teachers toward pupils, families and groups different from one's own is of special importance for home economics teachers; in fact, any effective teacher has concern for pupils whatever their background. Fundamental interest in pupils is essential to establishing the kind of rapport which results in an optimum learning situation.

If college staff members can know early in the college program which prospective teachers have strong prejudices, they should be able to find ways to help students get more experience with pertinent groups, to intellectualize their attitudes and values, and to consider the influence of attitudes on the teacher's role in the classroom. The profile charts provide a convenient way to discuss with students their acceptance, as well as rejection of groups, and thus provide a base for planning what to do to improve attitudes. The extent of the challenge to college teachers is emphasized by the finding that attitudes toward groups and families change, but more frequently toward less positive ones. Further research could help to provide a base for an intelligent attack on this problem of increasing acceptance. In this study, as in the attitude toward children, there was more gain than loss on the part of seniors but a greater loss with first-year teachers. This provides, therefore, an opportunity for supervisors and administrators to try to help teachers see possibilities in becoming more acceptant of differences, in fact, to recognize the challenge provided in coming to know and appreciate the opportunity to work with such groups; namely, foreigners, persons with little education, slum families, factory workers, those of another race or others whom the inventory shows are not being accepted.

The differences found among institutions and among students indicate to what extent this problem is an individual one, not to be solved by wholesale prescription or rigid procedures, or even by experiences unless satisfactorily motivated. It is apparent that specific means are needed to reveal attitudes, as was shown in the differences between what seniors and teachers said in relation to change in their attitudes and what the inventory disclosed.

In trying to find factors associated with change in this part of the study, an effort was made to determine the relation between quality of an experience in addition to type and amount. The significance, for example, of pleasantness of, or satisfaction in an experience in influencing attitudes, suggests that in a further search for ways to enhance student and teacher attitudes important in their profession, it would be well to explore further qualities of different types of experiences.

The significant differences among junior students at different institutions on 8 problems and among senior students on 11 of 20 problems raises questions which might well be studied further. Do institutions draw from such different groups or is this difference partly due to the attention given in institutions to this characteristic of students?

The fact that knowing groups made a difference in attitudes of juniors but not of seniors and first-year teachers may suggest the need for a further study. If the college and the school administrators deliberately help students and teachers see values in knowing and accepting different groups, would this have made a difference in the results?

The lack of association with scores of a variety of experiences and the indication that type of experience may be associated with acceptance scores indicates the latter factor may well be studied further and that selection of experience, its timing and quality may well be a helpful guide in institutions where growth in acceptance is a goal of staff and students.

This instrument, The Teacher and the Community, was developed for use in this cooperative study. It was found to have a high reliability in the tests given and there were evidences of its validity. The time required for its development prevented carrying through some of the steps which one might wish to take. There are for this reason many opportunities for additional research in studying the inventory further and trying it out with other groups. For example, it could well be tried with a large number of students and teachers in other fields than home economics. An item analysis on a national sample would be worthwhile. Reliability could be checked with a larger sample. A simpler scoring plan has had some attention, but has not yet been worked out.

Because this longitudinal study began with college students at the junior level, it would be well to discover what, if any, change in acceptance scores occur between freshmen and junior years and factors associated with these changes, as well as factors associated with freshmen scores. For example, are size of home community, parents' education, father's occupation, related to freshmen scores?

Other studies which suggest themselves are: test a large number of experienced teachers who have had opportunity as teachers to work with specific groups and develop a profile sheet showing acceptant and nonacceptant levels of these teachers; compare acceptance scores of first-year teachers with those of various levels of experience; explore other ways of sampling acceptance or getting evidence.

At the undergraduate level it is questionable whether the importance of this characteristic of acceptance of people and groups different from one's own has been given much attention. Yet if college teachers become aware of prejudices which exist among students, most would agree that the four years of college should add greatly to students' understanding of themselves and of others, particularly those who have lived under different conditions and hold different values. A deliberate plan could well be made to find the extent and kind of acceptance or nonacceptance of students and help them grow in understanding, and in ability to find satisfaction in working with different groups. For example, an institution could develop an experience program and seminar for students in an attempt to help them see the teacher's role with all types of children and families and attempt to find the extent of experiences and personal involvement, which is needed for change in attitude to take place.

Because the data on the three parts of the longitudinal study were gathered in different years, only a limited amount of study was given to determining the relation between the three instruments used. The sub-study on interest in teaching and attitude toward children done with students in one institution showed no significant correlation. Further study of this problem and of the relation of each of these characteristics to acceptance of families and groups different from one's own could well be conducted. One could test the relationship of scores on the inventory to teacher-pupil rapport. Then, compare the results on The Teacher and the Community Inventory and the Minnesota Teacher Attitude Inventory (MTAI) as predictors of rapport. Further study of similarities and differences in these three characteristics of students and teachers, as revealed by these three inventories would be useful in determining whether all three, or parts of the three, or only one was needed at different stages of the student's development and in the teaching situation.

APPENDIXES

APPENDIX A

Data Sheets Used in the Study of Attitudes Toward Children:

Student Data Sheet (Freshman)
Senior Data Sheet
First-Year Teacher Inservice Data Sheet
Supplementary Data Sheet for Teachers-In-Service Who Checked the Minnesota Teacher Attitude Inventory in 1954-55

Table I	Home Economics Freshmen, 1954: Last School Level Mother Attended
Table II	Home Economics Freshmen, 1954: Principal Occupation of Father or Guardian at the Time You Graduated From High School
Table III	Your Source of Funds for College This Year
Table IV	Experience with Care of Children as Baby Sitters
Table V	Present Class Responsibilities Related to Length of Teaching Experience and MTAI
Table VI	"Combined Enrollment" Related to Length of Teaching Experience and MTAI
Table VII	Level of My Home Economics Classes Related to Length of Teaching Experience and MTAI
Table VIII	Space and Facilities in My Home Economics Department Related to Length of Teaching Experience and MTAI
Table IX	Assistance from Principal Related to Length of Teaching Experience and MTAI
Table X	Assistance from Home Economics Supervisor Related to Length of Teaching Experience and MTAI
Table XI	Credits Earned Beyond the Bachelor's Degree Related to Length of Teaching Experience and MTAI
Table XII	Marital Status Related to Length of Teaching Experience and MTAI
Table XIII	Time Spent on Nonclass Activities During the Past Week Related to Length of Teaching Experience and MTAI
Table XIV	Experience with Conferences or Institutes for Home Economics Teachers Related to Length of Teaching Experience and MTAI

Table XV Experiences with Workshops for Home Economics Teachers Related to Length of Teaching Experience and MTAI

Table XVI Experiences with Conferences or Institues for Local School Faculty Related to Length of Teaching Experience and MTAI

Table XVII Percentile Rank Equivalents for Raw Scores on the Minnesota Teacher Attitude Inventory, Form A

Table XVIII Pilot Study, Seniors, 1954: Percentile Rank Equivalents for Raw Scores on the Minnesota Teacher Attitude Inventory

______

STUDENT DATA SHEET (FRESHMAN)
(Used in the Study of Attitudes Toward Children)

Name__________________________ College or University____________________

If you transferred, did you transfer from another college or department within the institution after:

_____(1) one year or less attendance
_____(2) more than 1 and less than 3 years attendance
_____(3) three or more years attendance

If you transferred, did you transfer from another institution to this institution after:

_____(1) one year or less attendance
_____(2) more than 1 and less than 3 years attendance
_____(3) three or more years attendance

Have you changed your major within the home economics field?

_____Yes _____No

Indicate the number of courses taken in these areas:

_____(1) Child Development
_____(2) Child Psychology
_____(3) Mental Hygiene
_____(4) Family Relationship
_____(5) Adolescent Psychology
_____(6) Sociology
_____(7) Human Growth and Development
_____(8) Home Management Residence

Check (x) the kind and amount of experience you have had with children:

	Little or none	Some	Much
_____(1) Responsible for temporary care such as baby sitting	____	____	____
_____(2) Responsible for care of child(ren) for a few days	____	____	____
_____(3) Responsible for care of child(ren) for a longer period	____	____	____
_____(4) Teaching Sunday School class	____	____	____
_____(5) Playground supervisor	____	____	____
_____(6) Camp work	____	____	____
_____(7) Club leader (4-H, Girl Scout, Campfire, etc.)	____	____	____

Check (x) the proportion of time your mother was employed outside the home while you were:

	None	Less than half-time	Approximately half-time	Full-time
Preschool age	____	______	______	____
Elementary school age	____	______	______	____
High school age	____	______	______	____

Directions: For the 5 sections below, check (x) ONE AND ONLY ONE item in each section:

1. Size of high school from which you graduated:

_____(1) Less than 100 pupils
_____(2) 100-499 pupils
_____(3) 500-999 pupils
_____(4) 1,000 or more pupils

2. Number of brothers and sisters:

_____(1) None
_____(2) One
_____(3) Two to five
_____(4) More than five

3. Last school level mother attended:

_____(1) Elementary
_____(2) High school
_____(3) College*

*Do not include beauty or business college.

4. Your marital status:

_____(1) Single
_____(2) Married
_____(3) Widowed or divorced

5. Ages of your children:

_____(1) Have no children
_____(2) Preschool age only
_____(3) Elementary school age only
_____(4) Beyond high school only
_____(5) Combination of above

____
(give ages)

November, 1957

COOPERATIVE HOME ECONOMICS RESEARCH
Senior Data Sheet
Revised
(Used in the Study of Attitudes Toward Children)

Code Column	Information
1	Identification of sample....5
2	Institution: 1. Illinois State Normal 2. University of Illinois 3. Iowa State College 4. Michigan State 5. University of Minnesota 6. Northwestern Missouri State 7. Ohio State University
3-4	Identification number
5-7	Freshman MTAI as I
8-10	Junior MTAI as II
11-13	Senior MTAI as III
14-16	MTAI III minus MTAI I + 100
17-19	MTAI II minus MTAI I + 100
20-22	MTAI III minus MTAI II + 100
23	Grade in student teaching
24-45	Questionnaire items
46-50	MTAI I squared
51-55	MTAI II squared
56-60	MTAI III squared
61-65	MTAI III - MTAI I + 100 squared
66-70	MTAI III - MTAI II + 100 squared
71-75	MTAI II - MTAI I + 100 squared

Date__________	1-4__________	14-16__________
Name__________	5-7__________F	17-19__________S-F
College or University__________	8-10__________J	20-22__________J-F
	11-13__________S	23__________S-J

Directions: Please respond to each item in the list below. A code for indicating your responses precedes the group of items.

The following items are concerned with the amount of experience you have had with children or adolescents since you came to college (including summer experiences):

Write 0 if you have had no experience
Write 1 if you have helped someone else
Write 2 if you have had responsibility on a few occasions
Write 3 if you have had extensive responsibility

_____24. Care of children as a baby sitter.

_____25. Care of younger brother or sister.

_____26. Supervisor of playground.

_____27. Camp counselor.

_____28. Sponsorship of clubs (4-H, Girl Scout, Campfire, etc.)

_____29. Teaching younger children

_____30-31. (Do not write in this space.)

Directions: Use one of the code (Number) to indicate your answer to each question below. Please write the number of your answer (one of the numbers in parentheses) on the line to the left of the item number.

_____32. What is your marital status?

(1) Single
(2) Married - childless
(3) Married and have child(ren)
(4) Widowed or divorced - no children
(5) Widowed or divorced and have child(ren)

_____33. Write the number of the one category to indicate the number of hours of credit you have taken in child psychology and/or child development, during your junior and senior years:

(1) None
(2) 1-3 quarters or 1-2 semesters
(3) 4-6 quarters or 3-4 semesters
(4) 7-9 quarters or 5-6 semesters
(5) 10-12 quarters or 7-8 semesters
(6) More than 12 quarters or 8 semesters

_____34. Write the number of the one category to indicate the number of credits you have taken in personal and family relationship courses during your junior and senior years:

(1) None
(2) 1-3 quarters or 1-2 semesters
(3) 4-6 quarters or 3-4 semesters
(4) More than 6 quarters or 4 semesters

_____35. Write the number of the one category to indicate the number of credits you have taken in education courses during your junior and senior years.

(1) None
(2) 1-3 quarters or 1-2 semesters
(3) 4-6 quarters or 3-4 semesters
(4) 7-9 quarters or 5-6 semesters
(5) 10-12 quarters or 7-8 semesters
(6) More than 12 quarters or 8 semesters

_____36. Indicate the confidence you felt during your student teaching experience by writing the one number corresponding most closely to your reactions:

(1) I felt confident in subject matter, teaching techniques and discipline.
(2) I felt confident in subject matter and teaching techniques but not in discipline.
(3) I felt confident in subject matter and discipline but not in teaching techniques.
(4) I felt confident in teaching techniques and discipline but not in subject matter.
(5) I felt confident in subject matter but not in teaching techniques or discipline.
(6) I felt confident in teaching techniques but not in subject matter or discipline.
(7) I felt confident in discipline but not in subject matter or teaching techniques.
(8) I lacked confidence in all three areas.

_____37. Indicate your feeling toward high school students as a result of your student teaching experience by writing the one number corresponding most closely to your reactions:

(1) I felt confident in working with junior high school pupils (7th, 8th and 9th grade) but not with senior high school pupils (10th, 11th and 12th grade).
(2) I felt confident in working with senior high school pupils but not with junior high school pupils.
(3) I felt confident in working with both junior and senior high school pupils.
(4) I did not feel confident in working with either junior or senior high school pupils.

(5) I felt confident in working with junior high school pupils but had no experience with senior high school pupils.
(6) I did not feel confident in working with junior high school pupils and had no experience with senior high school pupils.
(7) I felt confident in working with senior high school pupils but had no experience with junior high school pupils.
(8) I did not feel confident in working with senior high school pupils and had no experience with junior high school pupils.

_____38. *What kinds of help did you receive from your university supervisor during student teaching? Write only the one number which corresponds to the most representative description of your experience:

(1) Indicated how and what she thought I should do.
(2) Helped me find ways to solve problems I asked about.
(3) Made me aware of new problems and ways I could improve.
(4) Encouraged me to accept responsibility for my own growth as a teacher.
(5) She had so many other responsibilities that there was little time left for conferences.

_____39. What kinds of help did you receive from your supervising teacher in the school during student teaching? Write only the one number corresponding to the most representative description of your experience:

(1) Indicated how and what she thought I should do.
(2) Helped me find ways to solve problems I asked about.
(3) Made me aware of new problems and ways I could improve.
(4) Encouraged me to accept responsibility for my own growth as a teacher.
(5) She had so many other responsibilities that there was little time left for conferences.

_____40. How valuable was your student teaching experience? Write only the one number corresponding to the most representative description of your experience:

(1) One of the most valuable of all my college courses.
(2) Increased my interest in teaching as a profession.
(3) A worthwile experience.
(4) Decreased my interest in teaching as a profession.
(5) Too much work for the value I received.

_____41. If you were completely free to accept a teaching position next year, what would you choose to do? Indicate only one, your first choice:

(1) Teach homemaking in a city school.
(2) Teach homemaking in a large town.
(3) Teach homemaking in a small town.
(4) Teach in an elementary school.
(5) I would not teach.
(6) Other, list ________________

*In institutions for which this does not apply, print your data sheet to read X 38.

_____42. What are your plans for next year? Write only one number:

(1) Become a full-time homemaker.
(2) Teach homemaking.
(3) Teach in an elementary school.
(4) Go into extension work.
(5) Remain in college and work for another degree.
(6) Travel.
(7) Other, list ____________________

43. Check all of the subject matter areas in which you taught as a student teacher:

_____(0) Foods and nutrition
_____(1) Textiles and clothing
_____(2) Child care
_____(3) Home improvement
_____(4) Consumer education
_____(5) Grooming
_____(6) Relations with friends
_____(7) Family relationships
_____(8) Crafts
_____(9) Others, list ______________

44. How many pupils did you have in the high school classes you taught as a student teacher? Place an X for each separate high school class that you taught as a student teacher. (If you had two classes of similar size, make two X's in the corresponding blank):

_____(1) Less than 15 pupils
_____(2) 15 to 25 pupils
_____(3) 25 to 30 pupils
_____(4) 30 to 35 pupils
_____(5) Over 35 pupils

____ 45. Did you teach mixed classes during your student teaching experience? Write the number corresponding to the sex of the pupils that you taught. Indicate only one.

(1) Girls only
(2) Boys only
(3) Girls and boys

COOPERATIVE STUDY OF HOME ECONOMICS EDUCATION
First-Year Teacher Inservice Data Sheet
(Used in the Study of Attitudes Toward Children)

1 - 7 _______________

8 - 10_______________

11. Please give name and location of the school from which you received your bachelor's degree____

Directions: Please check ONE AND ONLY ONE answer to each of the following questions.

12. Present class responsibilities:

_____(1) Home economics and other subjects
_____(2) Home economics only

13. Sex of pupils taught:

_____(1) Girls only
_____(2) Boys only
_____(3) Girls and boys

14. Total (combined) enrollment in all of my classes (not including classes of adults) the present semester:

_____(1) Less than 25 pupils
_____(2) 25 to 49
_____(3) 50 to 74
_____(4) 75 to 99
_____(5) 100 to 124
_____(6) 125 to 174
_____(7) 175 or more

15. Level of my home economics classes the present semester:

_____(1) Elementary only
_____(2) Elementary and junior high school
_____(3) Junior high school only
_____(4) Senior high school only
_____(5) Junior and senior high school

16. My responsibility during the year for homemaking education with adults is:

_____(1) None
_____(2) Nonclass activity, but planned
_____(3) One series of 6-10 lessons
_____(4) More than one series
_____(5) Combination

17. My load as a teacher is:

_____(1) Satisfactory
_____(2) Too heavy

18. Space and facilities in my home economics department are:

_____(1) Adequate for all the groups I teach
_____(2) Adequate for some classes or for some phases only
_____(3) Inadequate for my work but school has plans for improvement
_____(4) Inadequate for my work and no plans for improvement

19. (Please check only the one most representative of your experience.)

My Principal:

_____(1) Tells me what to do
_____(2) Helps me work out problems
_____(3) Leaves me alone
_____(4) Gives me suggestions as I ask for them

20. (Please check the one most representative of your experience.) The Home Economics Supervisor (local, city district, state, or itinerant teacher trainer.)

_____(1) Indicates how and what she thinks I should do
_____(2) Helps me find ways to solve problems I ask about
_____(3) Makes me aware of new problems and ways I can improve
_____(4) Encourages me to carry responsibilities for assisting in city, district, or state programs.
_____(5) Gives little or no help

21. Marital status:

_____(1) Single
_____(2) Married
_____(3) Widowed or divorced

22. Parenthood:

_____(1) Have no child(ren)
_____(2) Have child(ren)

Directions: Please respond to each item in the lists below. A code for indicating your responses precedes each group of items.

Professional Activities

The following items are concerned with the amount of time which you spent on nonclass activities during the past week. Please indicate the amount of time for each activity by means of the following code:

0 indicates no time spent
1 indicates less than one hour
2 indicates between one and two hours
3 indicates more than two hours

23._____Home Economics Club or FHA
24._____Class adviser
25._____Home visits and guidance of home experiences
26._____School money-making projects
27._____Attendance at school functions (social, athletics, programs, P.T.A., etc.)
28._____Responsibility for school functions
29._____Study halls
30._____Homeroom period
31._____Clerical work
32._____Special duties such as hall
33._____School lunch program
34._____Counseling activities, excluding home experiences
35._____Care of laboratory
36._____Committee and staff meetings
37._____(List others)____
38-
39._____(Do not mark in this space.)

Professional Improvement Activities

During the past year, what experiences have you had which lead to professional improvement? Please use the following code:

0 if you have had no opportunity to participate in the activity
1 if you have participated in the activity
2 if you have used ideas gained

40._____Conferences for home economics teachers (less than one week)
41._____Conferences for home economics teachers (at least one week)
42._____Conferences for teachers in several fields
43._____Conferences for your local school faculty
44._____Professional courses
45._____Professional reading
46._____(List others)____
47-
48._____(Do not mark in this space.)

Return to:

SUPPLEMENTARY DATA SHEET FOR THE TEACHERS-IN-SERVICE WHO CHECKED THE MINNESOTA TEACHER ATTITUDE INVENTORY IN 1954-55

No. ______

1. What type of teaching certificate did you hold LAST YEAR (1954-55)?

___(1) TEMPORARY (Vocational, high school, or Special)
___(2) PROVISIONAL (Vocational, high school, or Special)
___(3) PROFESSIONAL (Vocational, high school , or Special)
___(4) PERMANENT (Vocational, high school, or Special

2. When did you receive your Bachelor's degree in Home Economics?

_______(Give year)

3. Has your teaching experience been continuous since graduation from college?

___(1) Yes
___(2) No

4. If your answer to Question 3 was "No", state in what year you returned to teaching.

_______(Give year)

5. If your answer to Question 3 was "No", state whether you took any "refresher courses" or any other college work before returning to teaching.

___(1) Yes
___(2) No

6. Did you find discipline to be a problem LAST YEAR?

___(1) No, not at all
___(2) Only occasionally
___(3) Discipline situations sometimes arose, but I did not consider them a problem.
___(4) Often was a problem
___(5) Yes, very difficult for me

7. How would you describe the general attitude of LAST YEAR'S administration and faculty toward Home Economics?

___(1) Most favorable; promoted Home Economics in the school and/or community
___(2) Friendly toward the program
___(3) Rather neutral in attitude
___(4) Unfriendly
___(5) Antagonistic; saw no values in Home Economics as a general school subject; might even deride it to others

8. Check the terms below which are descriptive IN GENERAL of the pupils you had LAST YEAR. MOST of them were:

___(1) From farm homes
___(2) From rural non-farm homes
___(3) From suburban homes
___(4) From urban homes
___(5) Of foreign extraction
___(6) From Negro homes
___(7) From Jewish homes
___(8) From middle-class families
___(9) From lower-class families
___(10) From upper-class families

9. What girls DID YOU USUALLY HAVE in your Home Economics classes?

___(1) The most intelligent and capable girls in the school
___(2) Mostly the bright girls, with a few dull ones
___(3) Rather evenly balanced in intelligence
___(4) Mostly the dull girls, with occasionally a few bright ones
___(5) The "dumbbells" - those who were not thought capable of going on to college

10. Choose the statement which best tells HOW YOU FEEL ABOUT TEACHING:

___(1) In my opinion, teaching some other age group would be more interesting.
___(2) I have no special feeling of liking or dislike for junior and senior high school students; I accept them as part of the job.
___(3) Seeing young people develop under my guidance has given me some of my greatest satisfactions in teaching.
___(4) I have discovered that working with young people in school is very distasteful to me.
___(5) I have found work with junior and senior high school youth very pleasant and stimulating.

Table I: HOME ECONOMICS FRESHMEN, 1954: LAST SCHOOL LEVEL MOTHER ATTENDED

Institution		Elementary ONLY	Attended High School	Graduated from High School	College
G	N	13	7	24	12
	%	23	12	43	22
	MTAI mean	27.54	42.25	21.25	19.00
D	N	6	4	8	3
	%	29	19	38	14
	MTAI mean	16.83	34.25	25.38	15.33
A	N	15	18	42	37
	%	13	16	38	33
	MTAI mean	15.87	25.78	22.83	23.41
C	N	10	27	49	65
	%	7	18	32	43
	MTAI mean	15.60	25.70	18.57	26.63
F	N	28	33	143	232
	%	6	8	33	53
	MTAI mean	14.21	15.70	21.05	18.53
B	N	8	28	56	56
	%	5	19	38	38
	MTAI mean	5.88	13.96	10.27	10.86
E	N	12	30	66	68
	%	7	17	38	38
	MTAI mean	-2.75	1.83	-0.53	5.49

Table II: HOME ECONOMICS FRESHMEN, 1954: PRINCIPAL OCCUPATION OF FATHER OR GUARDIAN AT THE TIME YOU GRADUATED FROM HIGH SCHOOL

Institutions		General Labor	Business	Farm	Profes- sional	Skilled	F-Value
Teacher's Colleges							
G	N	7	17	23	3	5	
	%	13	30	41	5	11	$P > .05$
	MTAI mean	35.57	26.00	22.57	43.33	8.50	
D	N	1	5	14	0	0	
	%	5	24	66	0	0	$P > .05$
	MTAI mean	6.00	21.81	24.86	0	0	
Land-Grant Colleges							
F	N	17	159	135	95	26	
	%	4	36	31	22	6	$P > .05$
	MTAI mean	13.12	20.33	13.04	23.71	26.69	
E	N	16	80	27	30	22	
	%	9	45	16	17	12	$P > .05$
	MTAI mean	4.75	-0.29	1.78	7.07	2.59	
Universities							
A	N	9	40	31	15	14	
	%	8	36	28	13	12	$P > .05$
	MTAI mean	24.33	27.50	17.65	36.27	8.71	
B	N	13	45	43	24	20	
	%	9	30	29	16	14	$P > .05$
	MTAI mean	13.15	17.04	-1.56	22.88	9.75	
C	N	9	63	38	22	16	
	%	6	42	24	15	11	
	MTAI mean	-4.00	25.08	20.84	28.32	30.00	
Total	MTAI mean	11.42	23.29	11.36	28.13	15.94	

Table III: YOUR SOURCE OF FUNDS FOR COLLEGE THIS YEAR

Institution		Family	Others	F-Value
Teacher's Colleges				
G	N	16	40	
	%	29	71	$P > .05$
	MTAI mean	26.94	24.41	
D	N	7	14	
	%	33	67	$P > .05$
	MTAI mean	26.71	25.90	
Total	MTAI mean	26.87	24.80	
Land-Grant Colleges				
F	N	244	191	
	%	56	44	$P > .05$
	MTAI mean	18.18	20.46	
E	N	74	102	
	%	42	58	$P > .05$
	MTAI mean	-2.35	5.96	
Total	MTAI mean	11.34	15.41	
Universities				
C	N	61	90	
	%	41	59	$P > .05$
	MTAI mean	20.38	25.50	
A	N	40	72	
	%	36	64	$P > .05$
	MTAI mean	18.73	24.52	
B	N	66	82	
	%	45	55	$P > .05$
	MTAI mean	11.08	13.31	
Total	MTAI mean	16.31	21.11	

Table IV: EXPERIENCE WITH CARE OF CHILDREN AS BABY SITTERS

Institution		None	Some	Extensive
A	N	4	49	46
	%	4	49	47
	MTAI mean	20.25	20.86	23.72
C	N	7	71	61
	%	5	51	44
	MTAI mean	18.29	19.32	27.11
G	N	4	23	23
	%	8	46	46
	MTAI mean	14.00	23.26	30.39
F	N	21	207	165
	%	5	52	42
	MTAI mean	8.24	16.97	24.39
B	N	5	80	49
	%	4	59	37
	MTAI mean	1.20	5.15	24.55
E	N	8	61	76
	%	6	42	52
	MTAI mean	-7.12	-1.25	5.01
D	N	0	14	3
	%	0	82	18
	MTAI mean	0	25.29	18.33
Total	MTAI mean	7.90	14.12	21.53

Table V: PRESENT CLASS RESPONSIBILITIES RELATED TO LENGTH OF TEACHING EXPERIENCE AND MTAI

		H.E.- Others Boys & Girls			H.E.- Others Girls			H.E. Boys & Girls			H.E. Girls		
State	Years of Experience	N	%	MTAI mean	N	%	MTAI mean	N	%	MTAI mean	N	%	MTAI mean
I	0-4	25	24	11.96	4	4	19.25	16	15	44.31	59	57	23.22
	5-19	40	27	32.82	2	1	16.50	26	18	17.73	78	54	32.82
	20-more	19	24	4.79	3	4	47.67	19	24	31.16	38	48	15.82
II	0-4	36	14	20.11	27	11	19.07	9	4	22.89	180	71	24.96
	5-19	38	17	14.61	15	7	-2.27	16	7	34.56	153	69	22.76
	20-more	4	4	6.50	2	2	-53.50	15	16	43.40	74	78	11.65
III	0-4	42	38	7.95	3	3	9.67	6	5	29.67	60	54	27.80
	5-19	62	47	15.82	3	2	31.00	8	6	13.38	59	45	12.80
	20-more	19	22	22.47	3	4	23.33	8	9	33.50	56	65	18.79
IV	0-4	20	19	9.20	7	7	6.14	8	8	16.12	68	66	19.85
	5-19	24	19	10.75	7	6	22.43	13	11	9.38	79	64	21.28
	20-more	12	25	11.50	2	4	29.50	6	12	1.00	29	59	9.55
V	0-4	14	11	21.00	7	6	25.43	18	15	16.44	83	68	16.95
	5-19	16	10	15.50	6	4	-8.83	21	14	15.90	108	71	15.56
	20-more	1	1½	-53.00	1	1½	81.00	12	17	23.92	56	80	1.12
VI	0-4	12	16	-11.67	6	8	-10.67	3	4	-3.33	54	72	15.00
	5-19	34	22	8.50	14	9	18.78	7	4	8.71	99	64	12.31
	20-more	6	7	6.17	2	3	33.00	9	11	-3.00	63	78	-0.25
Totals	0-4	136	19	11.59	45	7	19.16*	56	8	24.52	434	66	21.99*
	5-19	201	23	16.32	44	5	10.02*	85	10	17.66	504	62	19.28*
	20-more	59	13	10.47	12	3	31.33*	61	15	23.77	296	69	8.11*

The percentages will total 100 per cent horizontally by years of experience, except in items where there were non responses.

*Significantly different by years of experience.

Table VI: "COMBINED ENROLLMENT" RELATED TO LENGTH OF TEACHING EXPERIENCE AND MTAI

State	Years of Experience	Combined Enrollment of:											
		49 or less			50-74			75-99			100 or more		
		N	%	MTAI mean	N	%	MTAI mean	N	%	MTAI mean	N	%	MTAI mean
I	0-4	6	6	-0.33	18	17	20.17	28	27	32.93	52	50	22.54
	5-19	15	10	27.93	28	19	20.00	38	26	35.68	65	45	31.26
	20-more	8	10	-9.88	7	9	25.28	13	17	26.69	51	64	19.25
II	0-4	18	8	25.89	53	21	13.90	92	36	24.10	86	34	27.64
	5-19	13	6	19.08	40	18	1.95	80	36	21.64	87	39	28.23
	20-more	7	7	-0.43	12	13	24.83	25	26	12.00	51	54	16.41
III	0-4	28	25	6.86	34	31	26.97	25	22	22.00	24	22	22.92
	5-19	27	21	-0.82	35	26	14.91	22	17	29.64	47	35	16.72
	20-more	9	10	36.89	21	25	27.67	20	23	23.70	36	42	11.94
IV	0-4	36	35	7.80	28	27	22.36	23	22	24.87	16	16	14.19
	5-19	32	26	10.28	24	20	18.33	27	22	22.52	40	32	21.02
	20-more	8	16	11.00	5	10	5.60	7	14	11.00	28	58	11.25
V	0-4	44	36	15.39	27	22	14.33	25	20	25.80	25	21	17.84
	5-19	49	32	15.24	23	15	19.78	27	18	20.74	53	35	8.96
	20-more	9	13	8.67	14	20	-1.86	21	30	13.62	24	34	-1.21
VI	0-4	23	31	13.43	10	13	5.60	14	19	18.71	28	37	-1.11
	5-19	30	20	12.03	37	24	11.97	24	15	13.79	63	41	10.86
	20-more	6	7	5.50	8	10	6.75	17	21	19.41	48	59	-6.02
Totals	0-4	150	20	12.82	147	22	20.74	165	27	25.63	206	30	19.77*
	5-19	164	18	12.18	167	20	14.66	179	23	24.13	322	38	19.64*
	20-more	45	11	10.98	63	15	15.08	93	22	17.00	223	51	8.29*

*Significantly different at the .01 level.

Table VII: LEVEL OF MY HOME ECONOMICS CLASSES RELATED TO LENGTH OF TEACHING EXPERIENCE AND MTAI

		Junior High			Senior High			Both		
State	Years of Experience	N	%	MTAI mean	N	%	MTAI mean	N	%	MTAI mean
I	0-4	29	28	29.10	34	33	24.09	40	38	19.62
	5-19	28	19	31.07	63	43	30.44	55	38	28.71
	20-more	24	30	12.33	47	60	22.91	7	9	6.28
II	0-4	62	25	23.14	17	7	20.65	171	68	23.94
	5-19	52	23	19.54	23	10	27.65	140	63	20.22
	20-more	38	40	8.79	19	20	37.05	34	36	10.56
III	0-4	14	13	13.86	66	59	20.82	30	27	19.73
	5-19	33	25	15.79	60	45	16.73	39	30	10.54
	20-more	26	30	1.15	39	45	29.67	21	25	30.00
IV	0-4	2	2	43.50	57	55	15.51	40	39	15.75
	5-19	22	18	33.59	63	51	15.32	38	31	13.53
	20-more	5	10	33.20	18	37	5.67	26	53	8.15
V	0-4	12	10	11.50	73	60	24.07	37	30	7.57
	5-19	28	18	6.07	88	58	18.52	36	24	12.14
	20-more	4	6	-18.50	50	71	0.26	15	21	28.73
VI	0-4	11	15	4.64	35	47	7.34	28	37	8.86
	5-19	36	23	22.17	70	45	13.40	47	31	3.83
	20-more	16	20	-21.75	43	53	2.44	22	27	16.73
Totals	0-4	111	17	21.15*	278	37	19.10	275	45	19.01
	5-19	184	21	20.29*	360	39	19.16	283	38	15.36
	20-more	103	24	1.99*	205	47	13.88	115	27	15.72

*Significantly different at the .01 level.

Table VIII: SPACE AND FACILITIES IN MY HOME ECONOMICS DEPARTMENT RELATED TO LENGTH OF TEACHING EXPERIENCE AND MTAI

		Adequate For All			Adequate For Some			Inadequate But Plans			Inadequate No Plans		
State	Years of Experience	N	%	MTAI mean	N	%	MTAI mean	N	%	MTAI mean	N	%	MTAI mean
I	0-4	27	26	19.07	38	36	27.34	32	31	21.91	7	7	28.57
	5-19	51	35	35.61	47	32	25.49	37	25	30.16	11	8	21.54
	20-more	32	40	19.28	22	28	15.77	18	23	20.67	7	9	13.00
II	0-4	85	34	26.87	86	34	24.88	67	27	16.63	11	4	25.45
	5-19	82	37	19.84	57	26	24.63	76	34	16.97	7	3	33.71
	20-more	36	38	12.56	19	20	8.53	32	34	20.56	8	8	20.00
III	0-4	32	29	33.94	46	41	12.83	25	23	16.72	8	7	14.38
	5-19	51	39	18.10	35	27	11.77	29	22	9.21	16	12	18.56
	20-more	38	44	17.58	22	26	23.77	20	23	25.00	6	7	21.00
IV	0-4	34	33	19.29	39	38	12.49	23	22	17.04	7	7	24.43
	5-19	48	39	19.17	36	29	18.08	28	23	16.46	9	7	15.11
	20-more	19	39	12.16	15	31	9.00	11	22	12.27	3	6	2.33
V	0-4	35	29	24.28	50	41	10.72	28	23	18.32	8	7	30.62
	5-19	57	38	17.38	41	27	12.39	42	28	16.40	11	7	1.45
	20-more	32	46	6.53	12	17	2.58	20	29	7.90	6	8	-3.33
VI	0-4	29	39	8.79	27	36	8.67	15	20	0.27	4	5	25.75
	5-19	41	26	9.12	63	41	19.22	38	25	7.21	13	8	1.54
	20-more	32	39	10.09	25	31	-7.32	17	21	-2.88	7	9	4.86
Totals	0-4	212	31	24.40*	255	37	16.64*	160	25	18.21	40	6	24.70
	5-19	294	35	19.82*	258	30	18.99*	218	27	15.54	62	7	12.61
	20-more	178	41	12.04*	108	25	8.31*	108	26	13.29	34	8	13.59

*Significantly different at the .05 level.

Table IX: ASSISTANCE FROM PRINCIPAL RELATED TO LENGTH OF TEACHING EXPERIENCE AND MTAI

		Helps Me With Problems			Leaves Me Alone			Suggestions When I Ask		
State	Years of Experience	N	%	MTAI mean	N	%	MTAI mean	N	%	MTAI mean
I	0-4	13	12	23.23	32	31	17.97	57	55	25.96
	5-19	35	24	19.97	32	22	24.00	75	51	31.29
	20-more	10	13	22.80	33	42	11.09	35	44	22.37
II	0-4	46	18	28.43	57	23	23.93	147	58	22.48
	5-19	39	18	27.31	60	27	16.45	122	55	20.11
	20-more	11	12	35.09	28	29	12.68	53	56	12.26
III	0-4	19	17	11.95	24	22	16.42	68	61	23.35
	5-19	20	15	15.75	36	27	7.22	74	56	17.23
	20-more	12	14	25.83	28	33	7.39	45	52	28.78
IV	0-4	19	19	28.79	19	19	23.68	63	61	10.78
	5-19	22	18	18.41	31	25	13.61	68	55	19.81
	20-more	7	14	5.43	16	33	7.88	24	49	11.75
V	0-4	26	21	23.15	27	22	14.81	67	55	17.30
	5-19	40	26	23.15	44	29	14.57	67	44	10.28
	20-more	8	11	2.88	23	33	-0.70	39	56	9.51
VI	0-4	10	14	-8.60	22	29	6.27	43	57	12.65
	5-19	33	21	12.94	37	24	9.49	80	52	11.98
	20-more	15	19	10.93	18	22	-5.61	45	55	0.47
Totals	0-4	114	17	22.32	155	24	18.61*	394	58	19.86
	5-19	169	20	21.09	216	26	13.84*	437	52	18.31
	20-more	60	14	18.50	137	32	5.51*	224	52	12.86

*Significantly different at the .05 level.

Table X: ASSISTANCE FROM HOME ECONOMICS SUPERVISOR RELATED TO LENGTH OF TEACHING EXPERIENCE AND MTAI

	Years of Experi-ence	Indicates How and What			Helps See Ways To Solve Problems			Makes Me Aware of Problems			Encourages Responsi-bility on Programs			Little or No Help		
State		N	%	MTAI mean	N	%	MTAI mean	N	%	MTAI mean	N	%	MTAI mean	N	%	MTAI mean
I	0-4	-	-	-	16	15	25.50	7	7	-7.43	2	2	39.50	79	76	25.57
	5-19	1	1	-6.00	18	12	45.39	12	8	48.83	7	5	40.86	107	73	24.26
	20-more	1	1	22.00	17	22	4.06	13	16	15.77	2	3	38.00	45	57	21.62
II	0-4	4	2	2.50	31	12	22.81	15	6	33.20	1	-	39.00	190	76	22.90
	5-19	6	3	7.67	38	17	34.66	22	10	34.68	9	4	45.44	139	63	14.12
	20-more	1	1	-15.00	26	27	11.62	14	15	37.64	10	11	31.00	40	42	7.52
III	0-4	-	-	-	18	16	16.44	10	9	18.80	1	1	66.00	78	70	21.59
	5-19	1	1	-26.00	13	10	12.15	12	9	40.33	4	3	14.25	94	71	11.82
	20-more	1	1	-29.00	18	21	2.17	8	9	40.75	3	4	34.67	52	60	22.98
IV	0-4	8	8	9.00	37	36	24.03	26	25	24.31	-	-	-	29	28	1.55
	5-19	4	3	7.75	40	33	12.70	16	13	35.56	13	11	24.15	50	40	15.92
	20-more	3	6	-15.33	6	12	7.50	13	27	12.62	7	14	34.57	17	35	7.70
V	0-4	11	9	14.00	49	40	17.78	23	19	29.09	1	1	34.00	31	25	13.32
	5-19	8	5	2.00	45	30	17.56	19	12	2.32	7	5	20.57	66	43	15.82
	20-more	-	-	-	13	19	7.85	7	10	5.43	-	-	-	46	65	4.52
VI	0-4	5	7	-24.20	9	12	6.67	13	17	20.31	-	-	-	45	60	11.13
	5-19	10	6	19.00	24	15	11.88	23	15	18.39	1	1	-8.00	89	58	11.07
	20-more	1	1	37.00	21	26	-8.24	16	20	-4.69	2	2	-8.50	38	47	9.45
Totals	0-4	25	4	4.88	154	21	19.99*	91	12	24.11	5	1	30.00	372	58	20.49
	5-19	27	3	6.78	166	19	21.16*	98	11	27.10	39	5	24.90	479	59	14.92
	20-more	7	2	-4.43	93	22	1.29*	68	15	15.29	19	5	33.00	224	51	13.25

*Significantly different at the .01 level.

Table XI: CREDITS EARNED BEYOND THE BACHELOR'S DEGREE RELATED TO LENGTH OF TEACHING EXPERIENCE AND MTAI

State	Years of Experience	None			Less Than Masters			Master or Equivalent			More Than Masters		
		N	%	MTAI mean	N	%	MTAI mean	N	%	MTAI mean	N	%	MTAI mean
I	0-4	47	45	15.19	57	55	30.54	-	-	-	-	-	-
	5-19	22	15	25.45	80	55	24.70	20	14	43.55	24	16	40.00
	20-more	8	10	2.12	32	41	16.94	16	20	17.94	23	29	25.26
II	0-4	176	70	21.29	72	29	28.85	1	-	42.00	2	1	34.00
	5-19	37	17	12.70	161	72	19.13	8	4	57.38	16	7	34.25
	20-more	6	6	6.00	54	57	8.52	14	15	29.86	21	22	24.67
III	0-4	59	54	15.90	49	44	25.04	2	2	13.00	-	-	-
	5-19	16	12	-2.94	97	74	15.40	10	8	25.10	8	6	33.12
	20-more	3	3	20.33	48	56	18.90	16	19	24.75	18	21	24.38
IV	0-4	52	50	14.83	45	44	20.64	4	4	-28.25	2	2	59.50
	5-19	14	11	16.36	60	49	10.70	24	20	32.54	24	20	21.92
	20-more	2	4	3.50	12	25	-4.67	12	25	15.83	23	46	14.74
V	0-4	72	59	18.69	46	37	15.00	2	2	56.00	2	2	13.50
	5-19	31	20	6.06	71	47	15.27	31	20	10.84	19	13	33.10
	20-more	1	1	46.00	28	40	-1.93	11	16	-6.27	30	43	15.17
VI	0-4	53	71	8.79	20	27	6.30	1	1	32.00	1	1	-28.00
	5-19	46	30	9.98	67	44	8.52	22	14	9.64	19	12	33.00
	20-more	5	7	-22.20	35	43	-7.00	18	22	1.56	23	28	19.70
Totals	0-4	391	60	17.92*	264	38	23.31*	9	1	6.33	5	1	23.60*
	5-19	152	18	10.03*	468	58	16.36*	111	12	23.95	102	12	30.90*
	20-more	24	6	2.25*	193	45	7.29*	84	19	13.63	127	30	18.04*

*Significantly different at the .05 level (columns 1-4); .01 level (column 2).

Table XII: MARITAL STATUS RELATED TO LENGTH OF TEACHING EXPERIENCE AND MTAI

State	Years of Experience	Single			Married			Widowed or Divorced		
		N	%	MTAI mean	N	%	MTAI mean	N	%	MTAI mean
I	0-4	45	43	35.38	57	55	16.86	2	2	-49.00
	5-19	35	24	31.91	92	63	27.77	19	13	39.56
	20-more	40	50	19.38	29	37	21.34	10	13	3.30
II	0-4	150	59	21.35	95	38	26.07	7	3	36.86
	5-19	84	38	22.00	115	52	17.17	23	10	31.91
	20-more	70	74	15.41	15	16	13.13	10	10	15.60
III	0-4	63	57	24.84	42	38	11.07	6	5	29.83
	5-19	35	27	12.91	74	56	13.73	23	17	20.35
	20-more	66	77	21.62	15	17	24.53	5	6	4.40
IV	0-4	40	39	22.05	58	56	10.03	5	5	48.40
	5-19	36	29	12.67	69	56	20.51	18	15	19.28
	20-more	32	65	5.22	11	23	18.73	6	12	17.83
V	0-4	47	39	19.62	70	57	16.33	4	3	24.00
	5-19	52	34	15.65	83	55	13.81	17	11	16.29
	20-more	55	79	5.51	12	17	6.17	3	4	9.33
VI	0-4	41	55	6.73	31	41	6.26	3	4	42.00
	5-19	46	30	14.93	95	61	10.54	14	9	13.64
	20-more	55	68	3.49	19	23	-8.16	7	9	12.57
Totals	0-4	335	50	23.45*	308	46	15.70	27	4	29.12
	5-19	259	31	18.15*	477	57	16.80	100	12	22.88
	20-more	296	69	11.09*	94	22	14.27	39	9	7.40

*Significantly different at the .01 level.

Table XIII: TIME SPENT ON NONCLASS ACTIVITIES DURING THE PAST WEEK RELATED TO LENGTH OF TEACHING EXPERIENCE AND MTAI

State	Years of Experience	Little			Considerable			Great Deal		
		N	%	MTAI mean	N	%	MTAI mean	N	%	MTAI mean
I	0-4	32	31	14.44	46	44	29.89	26	25	23.77
	5-19	45	31	21.67	66	45	36.61	35	24	27.88
	20-more	22	28	14.27	32	40	11.38	25	32	29.96
II	0-4	73	29	25.07	117	46	24.26	60	24	20.97
	5-19	53	24	20.58	103	46	21.41	65	29	19.12
	20-more	42	44	6.83	36	38	20.17	16	17	25.25
III	0-4	26	23	25.69	54	49	15.92	31	28	21.97
	5-19	32	24	5.88	60	45	20.40	38	29	13.95
	20-more	29	34	14.69	33	38	26.54	23	27	23.52
IV	0-4	17	16	12.47	39	38	11.54	46	45	22.50
	5-19	27	22	12.26	56	45	19.38	39	32	20.90
	20-more	13	26	-1.00	24	48	15.58	12	24	9.92
V	0-4	20	16	24.30	55	45	18.13	47	39	14.72
	5-19	41	27	15.68	69	45	16.29	42	28	11.19
	20-more	24	34	3.96	30	43	5.03	16	23	8.25
VI	0-4	18	24	-7.83	38	51	13.79	19	25	11.21
	5-19	33	21	11.36	69	45	8.46	53	34	17.36
	20-more	27	33	6.04	33	41	-4.48	21	26	5.24
Totals	0-4	163	24	18.91*	306	46	20.19*	201	30	19.64
	5-19	208	25	15.60*	382	45	20.42*	246	29	18.21
	20-more	147	34	8.10*	176	41	12.46*	106	25	18.18

*Significantly different at the .05 level.

Table XIV: EXPERIENCE WITH CONFERENCES OR INSTITUTES FOR HOME ECONOMICS TEACHERS RELATED TO LENGTH OF TEACHING EXPERIENCE AND MTAI

		No Opportunity			Attended			Shared on Program		
State	Years of Experience	N	%	MTAI mean	N	%	MTAI mean	N	%	MTAI mean
I	0-4	21	20	4.95	65	63	23.77	17	16	43.76
	5-19	18	12	14.22	94	64	29.86	33	23	37.03
	20-more	11	14	12.91	47	59	15.81	21	27	25.81
II	0-4	68	27	18.35	139	55	23.81	25	10	28.08
	5-19	39	18	12.38	120	54	17.38	42	19	33.52
	20-more	21	22	17.57	50	53	8.72	13	14	53.08
III	0-4	42	38	19.76	40	36	22.78	20	18	20.85
	5-19	34	26	11.03	62	47	12.53	22	17	32.18
	20-more	12	14	29.92	51	59	17.80	14	16	33.93
IV	0-4	31	30	11.58	54	52	19.67	14	14	18.28
	5-19	21	17	20.33	63	51	18.24	29	24	21.48
	20-more	8	17	1.38	22	45	19.18	9	18	11.44
V	0-4	12	10	22.33	97	79	16.10	13	11	26.54
	5-19	26	17	18.15	111	73	11.46	15	10	32.87
	20-more	14	20	-9.29	48	69	4.64	8	11	35.62
VI	0-4	36	48	11.22	29	39	5.07	7	9	1.86
	5-19	47	30	23.89	72	46	7.71	25	16	13.20
	20-more	21	26	5.71	46	57	0.09	11	13	6.91
Totals	0-4	188	27	16.98	374	55	20.29*	84	13	25.76
	5-19	174	20	17.00	472	56	16.48*	146	18	27.23
	20-more	81	19	10.05	248	57	10.11*	70	17	25.40

*Significantly different at the .01 level.

Table XV: EXPERIENCES WITH WORKSHOPS FOR HOME ECONOMICS TEACHERS RELATED TO LENGTH OF TEACHING EXPERIENCE AND MTAI

State	Years of Experience	No Opportunity			Attended			Shared on Program		
		N	%	MTAI mean	N	%	MTAI mean	N	%	MTAI mean
I	0-4	95	91	24.10	5	5	18.60	4	4	18.00
	5-19	132	91	29.99	12	7	25.83	2	2	49.00
	20-more	66	83	16.48	10	13	22.10	3	4	39.33
II	0-4	172	68	21.02	43	17	25.00	17	7	33.47
	5-19	118	53	21.19	60	27	14.95	20	9	29.50
	20-more	51	54	14.06	25	26	27.36	7	7	22.57
III	0-4	77	69	17.09	17	15	35.41	6	6	30.83
	5-19	95	72	13.68	14	11	22.00	7	5	22.00
	20-more	60	70	20.70	12	14	24.25	5	6	26.80
IV	0-4	82	80	14.79	9	9	32.00	3	2	41.00
	5-19	86	70	18.22	17	14	16.35	7	6	22.86
	20-more	24	49	7.67	7	14	17.71	5	10	36.00
V	0-4	105	86	17.52	10	8	16.00	7	6	25.00
	5-19	130	86	13.92	16	10	13.56	6	4	35.00
	20-more	54	77	8.44	11	16	-9.91	5	7	6.20
VI	0-4	67	89	8.34	3	4	7.00	2	3	-8.00
	5-19	124	80	15.10	10	6	8.00	11	7	1.27
	20-more	58	71	0.22	12	15	3.58	7	9	17.71
Totals	0-4	537	78	18.45*	72	11	28.54	31	5	30.00
	5-19	638	73	18.42*	105	14	16.06	44	6	22.66
	20-more	299	68	11.18*	66	17	14.64	30	7	21.57

*Signficantly different at the .05 level.

Table XVI: EXPERIENCES WITH CONFERENCES OR INSTITUTES FOR LOCAL SCHOOL FACULTY RELATED TO LENGTH OF TEACHING EXPERIENCE AND MTAI

State	Years of Experience	No Opportunity			Attended			Shared on Program		
		N	%	MTAI mean	N	%	MTAI mean	N	%	MTAI mean
I	0-4	19	18	13.95	70	67	24.57	15	15	31.33
	5-19	35	24	31.51	79	54	23.80	31	21	43.45
	20-more	26	33	7.50	34	43	18.62	19	24	31.53
II	0-4	69	27	25.77	122	49	16.50	40	16	36.70
	5-19	46	21	21.74	106	48	13.82	48	21	30.54
	20-more	20	21	14.60	42	44	11.83	22	23	32.09
III	0-4	23	21	8.48	61	55	20.62	15	13	40.00
	5-19	26	20	12.65	70	53	13.40	21	16	27.86
	20-more	15	18	3.73	42	49	25.55	21	24	27.95
IV	0-4	26	25	14.92	51	50	17.67	19	18	21.84
	5-19	31	25	25.03	57	46	20.23	27	22	9.44
	20-more	7	14	-6.86	22	45	14.27	9	18	13.89
V	0-4	21	17	18.71	85	70	18.16	16	13	14.88
	5-19	17	11	-1.35	101	67	11.74	34	22	31.59
	20-more	7	10	2.00	55	79	3.58	8	11	20.88
VI	0-4	40	53	10.95	24	32	3.96	8	11	3.88
	5-19	28	18	13.00	81	52	11.41	32	21	21.31
	20-more	25	31	11.16	34	42	-12.18	19	23	17.63
Totals	0-4	174	26	17.27*	364	54	19.49*	102	15	27.76
	5-19	167	20	18.90*	452	53	15.37*	170	21	26.74
	20-more	92	22	7.59*	216	50	9.02*	91	21	25.09

*Significantly different at the .01 level.

Table XVII: PERCENTILE RANK EQUIVALENTS FOR RAW SCORES ON THE MINNESOTA TEACHER ATTITUDE INVENTORY, FORM A, STUDENTS

Percentile Rank	High School Seniors	University Freshmen	Beginning Education Juniors				Graduating Education Seniors (B.Ed.)				Graduate Students (Education)
			Early Childhood	Elementary	Secondary		Early Childhood	Elementary	Secondary		
					Academic	Non-academic			Academic	Non-academic	
99	76	73	113	101	104	99	118	118	116	107	115
95	61	55	100	97	96	85	112	113	107	101	106
90	54	44	96	92	83	77	106	108	101	96	103
80	40	28	89	83	77	69	100	100	90	85	93
75	34	22	86	79	72	64	97	96	86	80	88
70	28	18	82	76	66	60	94	93	82	76	85
60	19	11	72	68	57	53	88	88	74	71	79
50	13	5	65	63	48	46	83	82	68	67	70
40	5	-3	59	56	42	37	77	73	62	62	61
30	-4	-10	45	51	35	29	72	64	56	54	52
25	-8	-14	40	46	30	23	69	59	53	49	47
20	-11	-18	37	41	25	21	64	55	49	44	40
10	-22	-33	20	21	4	10	52	41	37	30	12
5	-34	-45	14	9	-1	-4	45	31	23	14	-7
1	-81	-59	-10	-13	-16	-19	4	11	4	-11	-21
N	122	384	134	228	136	238	108	150	237	185	200
Mean	12.8	4.8	65.9	59.5	48.3	44.1	80.4	77.4	67.8	63.3	64.0
SD	31.6	28.9	29.8	26.3	29.2	27.1	22.6	24.7	24.3	25.4	33.3

Table XVIII: COOPERATIVE RESEARCH PROJECT PILOT STUDY, SENIORS, 1954: PERCENTILE RANK EQUIVALENTS FOR RAW SCORES ON THE MINNESOTA TEACHER ATTITUDE INVENTORY

Percentile Rank	Institution							College
	A	C	B		D		G	
99	118	108	107	97	*	97	107	108
95	114	103	98	94		88	97	93
90	89	85	89	87		83	87	87
80	84	78	84	76		75	69	79
75	82	76	81	74		72	66	76
70	80	75	78	71		68	63	73
60	73	72	71	59		58	55	65
50	67	70	64	52		52	38	57
40	62	62	57	45		44	34	51
30	57	55	52	38		35	31	42
25	53	51	49	27		31	27	37
20	48	46	44	23		27	22	33
10	33	35	34	14		14	6	18
5	23	17	16	8		5	-8	10
1	3	11	4	-7		-12	-18	-8
N	33	30	47	36	7	83	26	262
Mean	65.5	63.3	63.2	51.4	51.3	49.7	45.5	56
SD	22.92	21.64	22.29	27.19	19.89	25.7	30.45	24.96

*D. Number too small to figure meaningful percentile rank equivalents.

APPENDIX B

Tables: Study of Experienced Teachers' Attitudes Toward Children

Table XIX Ohio Teachers Participating in the MTAI Study of Experienced Teachers: By Size of Secondary School System

Table XX Distribution of 245 Ohio Teachers as of 1945-55 by Size of Secondary School System and Years Since Graduation

Table XXI Mean Scores of 245 Teachers by Size of Secondary School System and Years Since Graduation as of 1954-55

Table XXII Date of Table: Shown in Three Time Periods

Table XXIII Number and Mean Scores of Those Who Had or Had Not Taught Continuously Since Graduation: By Size of School in Which Now Teaching

Table XXIV Relation of Four Factors in the School Situation to Scores on the MTAI: By Size of School System

Table XXV Characteristics of Pupils Most Representative of Small, Medium and Large Secondary School Systems in the Study

Table XXVI Teacher's Mean Scores When Certain Types of Pupils Were Characteristics of Their Classes as Given in Table 7

Table XXVII Number of Cities at Three Population Levels Listed in Each of the Six States in the 1950 Census

Table XXVIII Distribution of Ohio's Original Sample of 311 Schools by Population as of the 1950 Census: Middle (16-75 Teachers) and Large (75 or More Teachers) Only Included

Table XXIX Breakdown for the Middle Group of Teachers in Table 10: Distribution of Teachers by Number of Faculty in Secondary School System

Table XXX Classification of Teachers in the Middle Group of Schools by Districts

Table XIX: OHIO TEACHERS PARTICIPATING IN THE MTAI STUDY OF EXPERIENCED TEACHERS: BY SIZE OF SECONDARY SCHOOL SYSTEM

	Number of Participants			
Year Studied	Small Size (1-15 Faculty)	Middle Size (16-75 Faculty)	Large Size (76 or More Faculty)	Total
1954-55 (main study)	102	108	101	311
1956 (sub-study)	77*	88	90	255

*At this date (1964), 8 sheets are missing. Therefore, in tables where data are calculated at the present time, only 69 cases can be reported. The tables involved are Nos. XX, XXI, XXII, XXV, XXVI.

Table XX: DISTRIBUTION OF 245 OHIO TEACHERS AS OF 1945-55 BY SIZE OF SECONDARY SCHOOL SYSTEM AND YEARS SINCE GRADUATION

		Years Since Graduation					
Secondary School System	Median Year of Graduation	Less Than 5 Years	5-9 Years	10-14 Years	15-19 Years	20 or More Years	Total
1-15 Faculty	1938	12	4	12	11	30	69
16-75 Faculty	1939	14	14	9	11	38	86*
76 or More Faculty	1934	12	4	10	15	49	90
TOTAL		38	22	31	37	117	245

*For 2 cases, no data on this point.

Table XXI: MEAN SCORES OF 245 TEACHERS BY SIZE OF SECONDARY SCHOOL SYSTEM AND YEARS SINCE GRADUATION AS OF 1954-55

Secondary School System	Years Since Graduation Less Than 5 Years	5-9 Years	10-14 Years	15-19 Years	20 or More Years	Total
1-15 Faculty	123.00	101.50	117.83	110.45	107.90	112.29
16-75 Faculty	104.64	116.50	105.00	114.10	111.97	110.90
76 or More Faculty	100.17	128.25	101.40	108.60	99.14	102.40
ALL	109.03	115.91	109.81	110.69	105.61	108.19

Table XXII: DATE OF TABLE: SHOWN IN THREE TIME PERIODS

Secondary School System	Years Since Graduation Less Than 10 Years Mean Score	10-19 Years Mean Score	20 or More Years Mean Score
1-15 Faculty	117.63	114.30	107.90
16-75 Faculty	110.57	109.79	111.97
76 or More Faculty	107.19	105.72	99.14
ALL	111.55	109.82	105.61

Table XXIII*: NUMBER AND MEAN SCORES OF THOSE WHO HAD OR HAD NOT TAUGHT CONTINUOUSLY SINCE GRADUATION: BY SIZE OF SCHOOL IN WHICH NOW TEACHING

Teaching Status	Small Schools		Middle Schools		Large Schools		Total	
	No.	Mean	No.	Mean	No.	Mean	No.	Mean
Continuously Since Graduation	27	125.59	53	108.94	53	103.53	138	109.93
Not Continuously	50	105.62	35	113.86	32	100.34	117	106.64

*These data were calculated and recorded in 1956; hence they are for all 255 cases in the sub-study.

Table XXIV: RELATION OF FOUR FACTORS IN THE SCHOOL SITUATION TO SCORES ON THE MTAI: BY SIZE OF SCHOOL SYSTEM

	Number and Mean Scores of Participants							
	School Systems of 1-15 Faculty		School Systems of 16-75 Faculty		School Systems of 76 or More Faculty		Total	
Factors	No.	Mean	No.	Mean	No.	Mean	No.	Mean
Degree to which discipline was a problem								
Little or none	29	113.62	40	110.90	30	98.13	99	107.83
Some but not a problem	42	112.69	40	115.78	44	110.55	126	112.92
Often or very much a problem	6	107.33	8	86.50	16	88.00	30	91.47
Attitude of administration and faculty toward home economics								
Favorable	62	114.61	64	112.86	68	105.37	194	110.79
"Neutral"	10	102.50	17	96.77	19	91.47	46	96.80
Unfavorable	5	108.20	6	126.17	2	110.50	13	116.85
Mental ability of girls in home economics								
High group	7	120.43	6	128.00	2	98.00	15	120.47
"Balanced"	50	111.74	49	109.10	49	110.86	148	110.57
Low group	17	109.29	32	111.56	37	90.92	86	102.23
Teacher's attitude toward working with young people								
Favorable	75	112.41	83	112.33	77	105.61	235	110.15
"Neutral"	1	146.00	4	91.25	6	90.00	11	95.55
Antagonistic	1	95.00	1	71.00	7	77.71	9	78.89

Table XXV: CHARACTERISTICS OF PUPILS MOST REPRESENTATIVE OF SMALL, MEDIUM AND LARGE SECONDARY SCHOOL SYSTEMS IN THE STUDY*

	Number of Times Checked					
	School Systems 1-15 Faculty		School Systems 16-75 Faculty		School Systems Over 75 Faculty	
Characteristics	No.	Per Cent	No.	Per Cent	No.	Per Cent
Farm	43	62.3	22	25.0	--	--
Rural non-farm	38	55.1	24	27.3	--	--
Suburban	--	--	34	38.6	22	24.4
Urban	--	--	50	56.8	59	65.6
Foreign	--	--	10	11.4	21	23.3
Negro	--	--	11	12.5	36	40.0
Jewish	--	--	--	--	15	16.7
Middle class	48	69.6	83	94.3	66	73.3
Lower class	18	26.1	21	23.9	41	45.6
Upper class	--	--	11	12.5	12	13.3

*Where data are not given, the number was less than 1 per cent. For small schools, N = 69; middle, 88; large, 90.

Table XXVI: TEACHER'S MEAN SCORES WHEN CERTAIN TYPES OF PUPILS WERE CHARACTERISTIC OF THEIR CLASSES AS GIVEN IN TABLE XXV

Characteristics	Mean Scores Small Schools	Middle Schools	Large Schools
Farm	119.33	95.36	--
Rural non-farm	119.37	115.46	--
Suburban	--	118.12	106.27
Urban	--	115.00	103.51
Foreign	--	131.60	88.76
Negro	--	106.00	99.19
Jewish	--	--	97.33
Middle class	113.60	112.92	102.08
Lower class	122.61	108.90	100.37
Upper class	--	111.27	101.25

Table XXVII: NUMBER OF CITIES AT THREE POPULATION LEVELS LISTED IN EACH OF THE SIX STATES IN THE 1950 CENSUS*

	Population		
States	25,000-49,999	50,000-99,999	100,000 and Over
Illinois	14	10 (4 of these in Cook County)	2 (1 of these in Cook County)
Iowa	8	4	1
Michigan	10	7	3
Minnesota	3	0	3
Missouri	5	2	2
Ohio	18	6	8

*"Population of Cities, 25,000 or More," World Almanac. 1962, p. 259 ff.

Table XXVIII: DISTRIBUTION OF SCHOOLS IN OHIO'S ORIGINAL SAMPLE OF 311 SCHOOLS BY POPULATION AS OF THE 1950 CENSUS: MIDDLE (16-75 TEACHERS) AND LARGE (75 OR MORE TEACHERS) ONLY INCLUDED

	School Systems of 16-75 Teachers		School Systems of 76 or More Teachers	
Population	No.	Per Cent	No.	Per Cent
100,000 or More	5	4.63	68	67.33
25,000-99,999	13	12.04	32	31.68
10,000-24,999	28	25.93	1	0.99
2,500-9,999	48	44.44	--	--
Under 2,500	14	12.96	--	--
TOTAL	108	100.00	101	100.00

Table XXIX: BREAKDOWN FOR THE MIDDLE GROUP OF TEACHERS IN TABLE XXIII: DISTRIBUTION OF TEACHERS BY NUMBER OF FACULTY IN SECONDARY SCHOOL SYSTEM

Range in Number	Number of Teachers
16-20	24
21-25	19
26-30	17
31-35	11
36-40	7
41-45	9
46-50	3
51-55	333
56-60	6
61-65	55
66-70	4
71-75	0
TOTAL	118

Table XXX: CLASSIFICATION OF TEACHERS IN THE MIDDLE GROUP OF SCHOOLS BY DISTRICTS

Districts	Teachers	
	No.	Per Cent
City	65	60.2
County	26	24.1
Exempted Villages	17	15.7
TOTAL	108	100.0

APPENDIX C

Data Sheets used in the Study of Professional Interest:

- Student Data Sheet: Freshman
- Student Data Sheet: Senior
- First-Year Teacher In-Service Data Sheet

1-4_____ STUDENT DATA SHEET: FRESHMAN Date_____

Name__________________________ Iowa State College (5,6)________________

Directions: For the 9 sections below, check (x) ONE AND ONLY ONE item in each section.

7. Last school level mother attended:

____(1) Elementary only
____(2) Attended high school
____(3) Graduated from high school
____(4) Attended college*
____(5) Graduated from 4-yr. college

8. Last school level father attended:

____(1) Elementary only
____(2) Attended high school
____(3) Graduated from high school
____(4) Attended college*
____(5) Graduated from 4-yr. college

*Do not include beauty or business college.

9. Principal occupation of father or guardian (at time of your H. S. graduation)

____(1) General worker (laborer, farm laborer, janitor, mine laborer, etc.)
____(2) Office worker (bookkeeper, cashier, postal clerk, etc.)
____(3) Owns or manages business (store, gas station, garage, hotel, barbershop)
____(4) Owns or manages farm
____(5) Rents a farm
____(6) Professional (lawyer, doctor, banker, teacher, minister, dentist, etc.)
____(7) Salesman (insurance, real estate, retail store, etc.)
____(8) Skilled tradesman (carpenter, electrician, machinist)
____(9) Other--describe____

10. You had home econ. in junior and/or senior high school

____(0) None
____(1) One year or less
____(2) Two years
____(3) More than 2 years

11. You have been a member of 4-H Club

____(0) Never
____(1) One year or less
____(2) Two years
____(3) More than 2 years

12. You have been a member of FHA or Home Econ. Club

____(0) Never
____(1) One year or less
____(2) Two years
____(3) More than 2 years

13. Was there a Future Teachers' Club in your high school? ___(1) Yes ___(2) No

14. If so, were you a member of it? ____(1) Yes ____(2) No

15. Have you had one or more of these experiences: mother of children, full-time teacher in elementary school, sole responsibility for care of children in a home for a month or more? ____(1)Yes ____(2) No

The following responsibilities are additional experiences you may have had.

Directions: Please respond to EACH item in the list on the following page. A code for indicating your responses is at the left of the items.

Write 0 if you have had no experience.
Write 1 if you have helped someone else.
Write 2 if you have had responsibility on a few occasions
Write 3 if you have had extensive responsibility

16, 17. ____(Do not write in this space.)

____Care of children as a baby-sitter
____Care of younger brother or sister
____Supervisor of playground
____Camp counselor
____Sponsorship of club (4-H, Girl Scout, Campfire, etc.)
____Teaching younger children in Sunday or vacation school

18-21. You may not have made a final selection of the type of wage-earning occupation for which you wish to prepare in college, but you probably have some preferences. Indicate in the column to the left the two which you now prefer. Place a 1 in front of your first choice and a 2 in front of your second choice. Leave blank the columns to the right.

	Scores		
____Clothing merchandising (buyer of clothing, fashion consultant, fashion promotion, training of clerks)	22-24		
____County extension work (home demonstration work)	25-57		
____Designing (textile, crafts, fashion)	28-30		
____Food product promotion (test kitchen, demonstrating, preparation of education materials, news releases, or food photography)	31-33		
____Food service directing (school lunch, dormitory, college or industrial cafeteria)	34-36		
____Home service representative (promoting sales or demonstrating use of stoves, refrigerators, laundry equipment, or any other household equipment)	37-39		
____Hospital dietetics	40-42		
____Interior decorating (Home furnishing consultant)	43-45		
____Journalism or radio	46-48		
____Restaurant or tea room managing	49-51		
____Social welfare and public health work (Home economist with a state, county, or city welfare agency)	52-54		
____Textile testing (chemical and physical testing of fabrics to determine wearing qualities, fading, etc.)	55-57		
____Teaching, high school	58-60		
____Work with young children (nursery school teaching, recreation, work in a chilren's hospital)	61-63		

Other--describe________________________________

____

Name of parent or guardian________________________________
Address of parent or guardian________________________________

STUDENT DATA SHEET: SENIOR

Date________________

Name_________________________Name of College or University________________

If married, maiden name_________________________Major____________________

Indicate which of the following factors were of importance in your selection of this major. Check (x) no more than three. Double check (xx) the one of most importance.

____(1) Availability of jobs.

____(2) Broad education in home economics.

____(3) Family or others strongly urged that I prepare for this occupation.

____(4) Have been interested in this occupation for a long time.

____(5) In emergency can return to field after marriage.

____(6) Interest in more than one area of home economics.

____(7) Salary.

____(8) Strong desire to work with young people.

____(9) This career combines well with marriage.

____(10) More opportunities to take courses in areas other than home economics.

____(11) Vacations and hours desirable.

____(12) Work with people rather than alone.

____(13) Advisor or counselor advised me to prepare for this occupation.

____(14) Other (specify)____

Please indicate in the column to the left your first two choices of occupations you would prefer to enter if entirely free to make a choice. Place a 1 in front of your first choice and a 2 in front of your second choice.

____Clothing merchandising (buyer of clothing, fashion consultant, fashion promotion, training of clerks)

____Designing (textile, crafts, fashion)

____County extension work (home demonstration work)

____Food product promotion (test kitchen, demonstrating, preparation of education materials, news releases, or food photography)

____Food service directing (school lunch, dormitory, college or industrial cafeteria)

____Social welfare and public health work (Home economist with a state, county or city welfare agency)

____Home service representative (promoting sales or demonstrating use of stoves, refrigerators, laundry equipment, or any other household equipment)

____Hospital dietetics

____Interior decorating (Home furnishing consultant)

____Journalism or radio

____Restaurant or tea room managing

____Teaching, high school

____Textile testing (chemical and physical testing of fabrics to determine wearing qualities, fading, etc.)

____Work with young children (nursery school teaching, recreation, work in a children's hospital)

____Other (describe)____

____

____

Name____
Name of parent or guardian__________________________________
Address of parent or guardian_______________________________
____

COOPERATIVE STUDY OF HOME ECONOMICS EDUCATION
First-year Teacher In-Service Data Sheet

Date_______

1 - 7 ____________ Name________________________________

8 - 10____________

11 ________________________________
College or University

Directions: Please check ONE AND ONLY ONE ANSWER TO ITEMS 12-16.

12. Present class responsibilities:

____(1) Home economics and other subjects
____(2) Home economics only

13. My load as a teacher is:

____(1) Satisfactory
____(2) Fairly satisfactory
____(3) Too heavy

14. Space and facilities in my home economics department are:

____(1) Adequate for all the groups I teach
____(2) Adequate for some classes or for some phases only
____(3) Inadequate for my work but school has plans for improvement
____(4) Inadequate for my work and no plans for improvement

15. Marital status:

____(1) Single
____(2) Married
____(3) Widowed or divorced

16. Parenthood:

____(1) Have no child(ren)
____(2) Have children

17. Please check only the one most representative of your experience.
My principal:

____(1) Tells me what to do
____(2) Helps me work out problems
____(3) Leaves me alone
____(4) Gives me suggestions as I ask for them

18. Please check the one most representative of your experience. The Home Economics Supervisor (local, city, district, state, or itinerant teacher trainer)

____(1) Indicates how and what she thinks I should do
____(2) Helps me find ways to solve problems I ask about
____(3) Makes me aware of new problems
____(4) Encourages me to carry responsibilities for assisting in city, district, or state programs
____(5) Gives little or no help

19. Please check the one most representative of your feelings about teaching.

____I like many aspects of teaching.
____I like some aspects of teaching.
____I like very few aspects of teaching.

Directions: Please respond to each item in the list below. A code for indicating your responses precedes the items.

Professional Improvement Activities

During the past year, what experiences have you had which lead to professional improvement? Please use the following code:

0 if you have had no opportunity to participate in the activity
1 if you have participated in the activity
2 if you have used ideas gained

____Conferences for home economics teachers (less than one week)
____Conferences for home economics teachers (at least one week)
____Conferences for teachers in several fields
____Conferences for your local school faculty
____Professional courses
____Professional reading
____(List others)____
20-21.
____(Do not mark in this space.)

APPENDIX D

Data Sheets and Tables: Attitudes Towards Groups and Families

	Incomplete Sentence Form
	Check Sheet: Evidences of the Degree to Which a Home Economics Teacher Accepts Different Types of Families
Table XXXI	Positive Ratings of Criterion Teachers: Per Cent of "Acceptant" and "Nonacceptant Persons Rated on Negative Characteristics
	Junior Data Form
Table XXXII	Negative Ratings of Criterion Teachers: Percentage of "Acceptant and "Nonacceptant" Persons Rated on Negative Characteristics
Table XXXIII	Junior Means and F Computed for Each One-Way Analysis of Variance of Problem Scores of Students in Different Universities
	Senior Data Form
	First-Year Teacher Data Form
Table XXXIV	Values of Chi-Square Showing Association Between the Pleasantness of Experience with Groups as Reported by Juniors and Their Problem and Total Scores

INCOMPLETE SENTENCE BLANK

Complete these sentences to express your real feelings.
Try to do every one. Be sure to make a complete sentence.

1. Small towns
2. If the wife works
3. Families who live in the slums
4. An only child
5. Catholics
6. People of low IQ
7. When grandparents live with the family
8. People living in the country
9. Large families
10. People of the laboring class
11. Teenagers
12. The house one lives in
13. A father
14. People who don't have a college education
15. Folks who live in the city
16. Jews
17. Immigrants
18. Being a teacher
19. The amount of money a family has
20. I feel accepted
21. Being on relief
22. Negroes
23. A family of boys

24. Protestants

25. Upper-class families

26 A "poor" home is

27. Parents today

28. A dirty child

29. People in the professional class

30. Divorced parents

31. Middle-class families

32. The kind of family I like best

CHECK SHEET: EVIDENCES OF THE DEGREE TO WHICH A HOME ECONOMICS TEACHER ACCEPTS DIFFERENT TYPES OF FAMILIES

+ Value	- Value
____1. Gives special help--outside or in class--to girl who for some reason (dirty, or otherwise objectionable) is not accepted by the group.	____a. Tends to ignore students who are of a social class lower than hers, and/or to favor those of the same or of a higher class.
____2. One or more of her students who are members of a minority group (race, religion or nationality) serve as officer in home economics club or as committee chairman, or with similar responsibility in home economics.	____b. Speaks critically of some religious or cultural group in the community; as, Mennonites, foreign population, etc.
____3. Helps some girls find ways to earn their materials in clothing class, and without other pupils knowing it.	____c. Rather insists that girls buy the "best" materials for clothing classes when they cannot afford it.
____4. Invites others to tell her class about dishes, or customs and family life in their ancestral country.	____d. Is hesitant about approaching families in a college town (or about working with college educated parents).
____5. Women of community voluntarily come to her for advice and suggestions, or offer her their services.	____e. Speaks disparagingly of the large families or the "only child" family some of the students come from.
____6. Helps her pupils make another from the "other side of the tracks" a welcome part of the group.	____f. Is not interested in visiting homes.
____7. Speaks enthusiastically about how much her home visits help her understand families.	____g. Complains about having to work with Negroes or Jews.
____8. Women from some of the poorer homes of the community come to her for advice, or for adult class.	____h. Hesitates to visit homes or make suggestions to girls from a higher socioeconomics class than her own (or lower).

____ 9. Helps student(s) find summer or after-school employment in order to continue in high school

____10. People of the community make her welcome in their homes.

____11. Is frequently asked by people of the community to serve on committees or carry other special responsibilities.

____12. Seems to enjoy groups made up of individuals with widely differing backgrounds (social, economic, educational, etc.).

____13. Takes special interest in providing opportunities for personal development to girls who have had little help in this at homes.

____14. Makes adjustments in the program for the girl who for some reason is carrying major responsibilities at home (has lost mother, or mother works, or parents are divorced).

____15. Speaks enthusiastically about community groups with which she has contact.

____16. Students make a point of introducing their parents to her, even though their status in the community may be particularly high, or low.

____17. Treats pupils alike no matter what the intellectual level of the homes they come from.

____18. Women from some of the better families come to her for advice, or for adult class.

____i. Complains about the low intellectual level of the homes which some of her pupils come from.

____j. Does not participate in community activities.

____k. Habitually gripes about the homes she works with.

____l. Is critical of homes where the mother works, where there is divorce, etc.

____m. Makes fun of or belittles the community where she is teaching or says she wishes she were teaching in a larger town, a smaller town.

____n. Speaks disparagingly of homes whose customs and family life are very different from what she is accustomed to.

____o. Complains about how some of the students smell.

____p. Says there is nothing she can do to help pupils from upper-class homes.

____q. Says she does not understand families today.

____r. Speaks disparagingly of the living conditions (mother's poor housekeeping, etc.) in some of her pupils' homes.

Table XXXI: POSITIVE RATINGS OF CRITERION TEACHERS: PER CENT OF "ACCEPTANT" AND "NONACCEPTANT" PERSONS RATED ON POSITIVE CHARACTERISTICS

Positive Characteristics	Acceptant Teachers (103) Per Cent	Nonacceptant Teachers (63) Per Cent
A. Treats pupils alike no matter what the intellectual level of the homes they come from.	99	11
B. Gives special help--outside or in class--to girl who for some reason (dirty, or otherwise objectionable) is not accepted by the group.	98	8
C. Takes special interest in providing opportunities for personal development to girls who have had little help in this at home.	95	13
Helps pupils make another from the "other side of the tracks" a welcome part of the group.	89	5
Students make a point of introducing their parents to her, even though their status in the community may be particularly high, or low.	83	2
Women from some of the better families come to her for advice, or for adult class.	74	10
Women from some of the poorer homes of the community come to her for advice, or for adult class.	68	2
Helps some girls find ways to earn their materials in clothing class, and without other pupils knowing it.	65	19
Helps student(s) find summer or after-school employment in order to continue in high school	47	3
Invites others to tell her class about dishes, or customs and family life in their ancestral country.	79	24

TABLE XXXI CONTINUED

Positive Characteristics	Acceptant Teachers (103) Per Cent	Nonacceptant Teachers (63) Per Cent
C. One or more of her students who are members of a minority group (race, religion or nationality) serve as office in home economics club or as committee chairman, or with similar responsibility in home economics	67	10
D. Makes adjustments in the program for the girl who for some reason is carrying major responsibility at home (has lost mother, or mother works, or parents are divorced).	86	8
E. In more general terms, she:		
Has people in the community make her welcome in their homes.	93	3
Seems to enjoy groups made up of individuals with widely differing backgrounds (social, economic, educational, etc.)	86	3
Speaks enthusiastically about community groups with which she has contact.	86	5
Speaks enthusiastically about how much her home visits help her understand families.	83	3
Has women of community voluntarily coming to her for advice and suggestions, or to offer her their services.	81	6
Is frequently asked by people of the community to serve on committees or carry other special responsibilities.	80	3

Table XXXII: NEGATIVE RATINGS OF CRITERION TEACHERS: PERCENTAGE OF "ACCEPTANT" AND "NONACCEPTANT" PERSONS RATED ON NEGATIVE CHARACTERISTICS

Negative Characteristics	Acceptant Teachers (103) Per Cent	Nonacceptant Teachers (63) Per Cent
A. Complains about the low intellectual level of the homes from which some of her pupils come.	6	75
B. Speaks disparagingly of the living conditions (mother's poor housekeeping, etc.) in some of her pupils' homes.	5	59
Tends to ignore students who are of a social class lower than hers, and/or to favor those of the same or of a higher class.	0	48
Hesitates to visit home or make suggestions to girls from a higher socioeconomic class than her own (or lower).	2	41
Complains about how some of the students smell.	0	29
Says there is nothing she can do to help pupils from upper-class homes.	1	27
Rather insists that girls buy the "best" materials for clothing classes when they cannot afford it.	0	25
Is hesitant about approaching families in a college town (or about working with college educated parents).	2	24
C. Tends to speak somewhat critically of some religious or cultural groups in the community; as, Mennonites, foreign population, etc.	0	30
Complains about having to work with Negroes, or Jews, or Mexicans, or Indians	0	13

TABLE XXXII CONTINUED

Negative Characteristics	Acceptant Teachers (103) Per Cent	Nonacceptant Teachers (63) Per Cent
D. Is critical of homes where the pattern differs from the "usual":		
Where the mother works; where there is divorce, etc.	3	41
Where the customs and family life are very different from what she is accustomed to.	0	37
Where there are many children or an "only" child.	0	32
E. In more general terms, she:		
Is not interested in visiting homes.	3	87
Does not participate in community activities.	0	70
Says she does not understand families today	0	40
Habitually "gripes" about the homes she works with.	0	29
Makes fun of or belittles the community where she is teaching; or says she wishes she were teaching in a larger town, a smaller town.	0	16

JUST SUPPOSE INVENTORY
JUNIOR DATA FORM

For research purposes only

Class Rank (Circle appropriate quarter or semester.)

Quarter 6 7 8 9 10 11 12 Semester 4 5 6 7 8

Name____ Date____________________

University___Ohio State University_______________ 1 - 5____________________

A. Directions: On this page, check (x) the one answer which is true.

6. Greatest portion of your life has been spent in a community of what size?

____(1) 100,000 or More
____(2) 25,000 to 100,000
____(3) 2,500 to 25,000
____(4) Under 2,500
____(5) Farm (If farm, give approximate population of town where you go most of the time.)

____

7-8. Last school level your parents reached (Check father in left column; mother in the right.)

Father		Mother
____	(1) Elementary school	____(1)
____	(2) Attended high school	____(2)
____	(3) Grad. from high school	____(3)
____	(4) Attended college*	____(4)
____	(5) Grad. from 4-year college*	____(5)

*Do not include beauty, barber, or business college.

X. Your own ethnic background:

____(1) Mexican
____(2) American Indian
____(3) Negro
____(4) Caucasian (white)
____(5) Oriental

Y. Your religious affiliation or preference:

____(1) Catholic
____(2) Jewish
____(3) Protestant
____(4) Other____________(name)
____(5) None

9. What kind of work does your father do? (If deceased, give work when living.)

____(1) General worker (laborer, farm laborer, janitor, mine laborer, etc.)
____(2) Office worker (bookkeeper, cashier, postal clerk, etc.)
____(3) Own or manages a small business (store, gas stations or garage, photography, barber shop, insurance agency, hotel, cafe, repair shop, etc.)
____(4) Owns or manages a larger business. (What business?__________ How many persons work for him?____________)

____(5) Owns or manages a farm
____(6) Rents a farm
____(7) Professional (lawyer, doctor, banker, teacher, minister, dentist, etc.)
____(8) Salesman (insurance, real estate, retail store, etc.)
____(9) Skilled tradesman (carpenter, electrician, machinist, etc.)
____(10) Other (Indicate what occupation)______________________________

Section B

Directions: Section B is concerned with the contacts you have had with different groups of people. Consider summer contacts, as well as those of the school year.

Please respond to each item in the list. Use the following code for indicating your responses. Give only one answer for each item.

Write X in front of the item if you have known no one in that group.
Write 0 if you have had unpleasant experiences with members of that group.
Write 1 if your experience has been neither pleasant nor unpleasant.
Write 2 if your experience has been pleasant.

____(a) Foreigners (other than foreign college students)
____(b) Middle-class families
____(c) Jews
____(d) People who have not attended high school
____(e) Old folks
____(f) People of low I.Q.
____(g) Protestants
____(h) Delinquent children
____(i) Small-town people
____(j) Factory workers
____(k) Working mothers
____(l) Upper-class families
____(m) Farm people
____(n) Catholics
____(o) People who have attended college
____(p) City people
____(q) Lower-class families
____(r) Divorced people
____(s) People of a race different from yours
____(t) Parents (other than your own)
____(u) Teen-agers today

____(22-23.) Do not write in this space.

Directions: Section C is concerned with how you feel today about different groups.

Respond to each item in the list, using the following code for indicating your responses. Give only one answer for each item.

Write 0 in front of the item if you strongly dislike people in that group.
Write 1 if you dislike them.
Write 2 if you are uncertain how you feel or have no definite feeling.
Write 3 if you like people in that group.
Write 4 if you very much like them.

____(a) Foreigners (other than foreign college students)

____(b) Middle-class families

____(c) Jews

____(d) People who have not attended high school

____(e) Old folks

____(f) People of low I.Q.

____(g) Protestants

____(h) Delinquent children

____(i) Small-town people

____(j) Factory workers

____(k) Working mothers

____(l) Upper-class families

____(m) Farm people

____(n) Catholics

____(o) People who have attended college

____(p) City people

____(q) Lower-class families

____(r) Divorced people

____(s) People of a race different from yours

____(t) Parents (other than your own)

____(u) Teen-agers today

____(38-39.) Do not write in this space.

Section D

Directions: This section deals with the ways in which you have come to really know people and groups different from yourself and your group. Be sure that they are different.

____(67) If you feel that you really do not know people very different from your own group, please check (x) here and omit the rest of this section.

If you do know some people very different from your own group, check (x) all those experiences in the following list which have helped you know these people.

____(a) Having outsiders work in my home
____(b) Visiting friends
____(c) Knowing students in college classes
____(d) Activities in church and/or Sunday School
____(e) Knowing others in various organizations
____(f) Reading newspapers, magazines
____(g) Seeing movies and television
____(h) Participating in camp and club activities (Scouts, etc.)
____(i) Association with schoolmates in grades or high school
____(j) Experiences in dormitory
____(k) Reading and studying about other groups in college courses
____(l) Dating someone from another group
____(m) Meeting people from other groups while traveling

Outside experiences provided by college courses which showed me people who were different such as:

____(n) Field trips in the community
____(o) Observations in schools
____(p) Home visits
____(q) Other (Specify)

Work experiences which showed me people who were different, such as working:

____(r) In homes of others
____(s) In store or office
____(t) In camp
____(u) In social service agencies (Settlement House, Well Baby Clinic, etc.)
____(v) Other (Specify)

____(68) Do not write in this space.

____(69-70) Do not write in this space.

____(71-72) Do not write in this space.

____(73-74) Do not write in this space.

____(75-76) Do not write in this space.

Section E

Directions: In this last section, you are asked to think about some feelings you have and why you feel as you do. This is perhaps the most important section of the form. So read the questions carefully, think, and then write so another can understand how you feel and why.

PART I.

A. What one or two groups different from your own do you have strong feelings against?

B. Describe the ways you feel.

C. What in your experience makes you feel as you do?...D. Have your feelings changed since you came to college?

Part II.

A. What one or two groups--like or different from your own--do you have strongly favorable feeling toward?

B. Describe the ways you feel.

C. What in your experience do you think makes you feel as you do?...
D. Have your feelings changed since you came to college?

Table XXXIII: JUNIOR MEANS AND F COMPUTED FOR EACH ONE-WAY ANALYSIS OF VARIANCE OF PROBLEM SCORES OF JUNIOR STUDENTS IN DIFFERENT UNIVERSITIES

		Universities							
Problem		1	2	3	4	5	6	All	F
I	Parents today								
	1959	50.0	52.0	50.7	51.4	49.8	52.2	51.3	0.772
	1960	48.6	53.7	49.0	52.3	--	53.5	52.3	3.494**
	Both	49.5	52.8	49.8	51.8	49.8	52.9	51.8	2.981*
II-1	City people								
	1959	17.1	18.6	18.3	18.5	17.3	18.7	18.2	2.342*
	1960	16.8	18.4	18.3	19.0	--	19.0	18.5	3.321*
	Both	17.0	18.5	18.3	18.8	17.3	18.9	18.4	4.172**
II-2	Town people								
	1959	20.1	19.0	19.4	17.7	19.9	19.3	19.1	2.977*
	1960	20.6	19.1	18.0	19.0	--	19.7	19.2	2.338
	Both	20.3	19.0	18.7	18.4	19.9	19.5	19.1	4.181**
II-3	Farm people								
	1959	22.1	21.1	21.4	20.4	21.4	22.0	21.3	2.494*
	1960	22.5	20.7	21.1	21.0	--	21.7	21.2	2.701*
	Both	22.2	20.9	21.3	20.7	21.4	21.8	21.3	4.841**
III-1	Divorced								
	1959	28.0	27.9	27.7	28.4	27.0	29.1	28.1	1.012
	1960	26.7	27.9	28.0	26.9	--	29.7	28.0	3.704**
	Both	27.5	27.9	27.9	27.7	27.0	29.4	28.0	1.546
III-2	Working mothers								
	1959	23.1	24.3	24.8	23.2	24.1	24.0	23.9	1.156
	1960	22.5	24.1	23.5	24.3	--	26.3	24.4	4.816**
	Both	22.8	24.2	24.1	23.8	24.1	25.3	24.1	3.221*
IV	Foreigners								
	1959	59.4	61.7	62.7	60.4	59.1	60.7	60.9	1.640
	1960	61.0	62.0	61.4	62.3	--	62.3	62.0	0.263
	Both	60.0	61.9	62.1	61.4	59.1	61.6	61.4	1.170
V-1	Those with little education								
	1959	36.0	35.2	34.8	35.0	35.4	34.1	35.1	0.751
	1960	36.1	35.8	35.0	36.6	--	34.2	35.6	1.943
	Both	36.0	35.5	34.9	35.8	35.4	34.2	35.3	1.874

TABLE XXXIII CONTINUED

		Universities							
Problem		1	2	3	4	5	6	All	F
V-1	Those with college education								
	1959	22.1	21.7	20.8	22.4	22.7	22.3	22.0	1.863
	1960	21.7	22.0	20.9	22.3	--	22.3	22.0	1.106*
	Both	21.9	21.8	20.9	22.4	22.7	22.3	22.0	3.108*
VI	Slum families								
	1959	54.1	54.5	53.5	54.1	54.5	55.8	54.5	0.507
	1960	53.1	55.0	53.3	56.5	--	56.3	55.2	2.064
	Both	53.7	54.7	53.4	55.3	54.5	56.1	54.8	1.716
VII-1	Catholics								
	1959	15.6	17.2	18.4	17.2	16.7	18.0	17.2	2.519*
	1960	17.0	17.0	17.4	16.6	--	18.7	17.4	1.861
	Both	16.1	17.1	17.9	16.9	16.7	18.4	17.3	2.815*
VII-2	Jews								
	1959	18.4	20.7	20.6	20.3	19.1	20.3	20.1	5.073**
	1960	19.0	20.4	20.3	21.0	--	20.5	20.4	1.939
	Both	18.6	20.6	20.4	20.6	19.1	20.4	20.2	6.323**
VII-3	Protestants								
	1959	20.4	19.8	20.2	20.5	19.9	20.0	20.1	0.733
	1960	20.3	19.8	20.0	20.8	--	20.3	20.2	1.507
	Both	20.4	19.8	20.1	20.6	19.9	20.2	20.1	2.129
VIII-1	Upper-class people								
	1959	34.2	35.4	34.6	36.4	34.4	36.8	35.4	1.642
	1960	32.5	35.8	33.2	37.9	--	36.1	35.7	6.574**
	Both	33.5	35.6	33.9	37.1	34.4	36.4	35.5	6.623**
VIII-2	Middle-class people								
	1959	20.2	20.2	19.4	19.8	19.9	19.8	20.0	0.849
	1960	19.1	20.0	19.7	19.9	--	19.4	19.7	1.442
	Both	19.8	20.1	19.5	19.8	19.9	19.6	19.9	1.408
IX	A problem school								
	1959	58.0	58.0	57.4	55.4	57.3	59.2	57.6	1.251
	1960	57.6	59.6	56.2	58.3	--	59.5	58.7	1.634
	Both	57.9	58.7	56.3	56.9	57.3	59.4	58.1	1.776

TABLE XXXIII CONTINUED

Problem		Universities							
		1	2	3	4	5	6	All	F
X	Factory workers								
	1959	58.3	58.2	59.3	56.1	57.4	57.9	57.8	0.999
	1960	58.5	57.5	56.9	59.2	--	57.6	57.9	0.920
	Both	58.4	57.9	58.1	57.7	57.4	57.5	57.9	0.170
XI	Persons of another race								
	1959	56.2	58.1	58.3	55.6	54.3	57.3	56.9	2.337*
	1960	57.5	58.0	56.4	58.6	--	58.0	57.9	0.538
	Both	56.7	58.1	57.4	57.1	54.3	57.7	57.4	0.876
XII-1	Youth								
	1959	24.0	24.8	24.9	24.0	24.4	25.7	24.7	1.557
	1960	23.9	25.6	24.1	25.2	--	24.7	25.0	1.823
	Both	24.0	25.2	24.5	24.6	24.4	25.1	24.8	1.723
XII	The aged								
	1959	28.7	27.4	29.0	27.6	27.4	27.9	27.8	1.035
	1960	29.4	28.2	28.0	27.3	--	26.8	27.8	1.626
	Both	29.0	27.8	28.5	27.4	27.4	27.3	27.8	1.965
	TOTAL								
	1959	665.9	675.8	676.2	663.6	662.0	681.0	671.8	1.022
	1960	664.3	680.8	660.8	685.0	--	686.8	679.1	1.801
	Both	665.3	678.0	668.5	674.5	662.0	684.2	675.1	1.047

*Significant at the 5 per cent level.
**Significant at the 1 per cent level.

JUST SUPPOSE INVENTORY
SENIOR DATA FORM

For research purposes only

Name____ Date__________________________

University_________________________________1 - 5__________________________

Section A

Directions: Section A is concerned with how well you know different groups of people either in your home community or at college.

Please respond to each item in the list. Use the following code for indicating your responses. Give only one answer for each item.

Write 0 in front of the item if you have known no one in that group.
Write 1 if you have a speaking acquaintance only.
Write 2 if you know some rather well, but have no friends in that group.
Write 3 if you have 1 or 2 or 3 friends in that group.
Write 4 if you have more than 3 friends in that group.

____(6) Foreigners (other than foreign college students)

____(7) Middle-class families

____(8) Jews

____(9) People who have not attended high school

____(10) Old folks

____(11) People of low I.Q.

____(12) Protestants

____(11) Delinquent children

____(13) Small-town people

____(14) Factory workers

____(15) Working mothers

____(16) Upper-class families

____(17) Farm people

____(18) Catholics

____(19) People who have attended college

____(20) City people

____(21) Lower-class families

____(22) Divorced people

____(23) People of a race different from yours

____(24) Parents (other than your own)

____(25) Teen-agers today

____(26-27) Do not write in this space.

Section B

Directions: This section deals with the ways in which you have come during the past two years to really know people and groups different from yourself and your group.

____(28) If you feel that in the past two years you really have not known people very different from your own group, please check (x) here and omit the rest of this page.

If you have in the past two years learned to know some people very different from your own group, such as some of those on page 209, list the groups.

In the following lists of experiences, check (x) all which have helped you know these people. Do not check the experience unless you had it some time during the past two years.

____(6) Having outsiders work in my home

____(7) Visiting friends

____(8) Knowing students in college classes

____(9) Activities in church and/or Sunday School

____(10) Working with others in organizations

____(11) Reading newspapers, magazines

____(12) Seeing movies and television

____(13) Experiences in dormitory or rooming house

____(14) Reading and studying about other groups in college courses

____(15) Dating someone from another group

____(16) Experiences in sorority

____(17) Experiences in other parts of the country or in other countries

Special experiences provided by college courses during the past two years which showed you people who were different. Such experiences as:

____(18) Field trips in a community

____(19) Observation and participation in schools

____(20) Home visits

____(21) Student teaching

____(22) Others (specify)

Work experiences of the past two years which showed you people who were different, such as working:

____(23) In homes of others

____(24) In a resort

____(25) In store, office or factory

____(26) In a camp for children or youth

____(27) In social service agencies (Settlement House, Well Baby Clinic, etc.)

____(28) Others (Specify)

____(29)

____(30-31)

____(32-33)

Section C

Directions: Section C is concerned with the different groups of people you have had contact with since you started your junior year. Include the intervening summer in this time.

Please respond to each item in the list. Use the following code for indicating your responses. Give only one answer for each item, and always in terms of the past two years.

Write X in front of the item if you have known no one in that group.
Write 0 if you have had very unpleasant experiences with member(s) of that group.
Write 1 if in general your experience with that group has been unpleasant.
Write 2 if your experience has been about equally pleasant and unpleasant.
Write 3 if in general your experience has been pleasant.
Write 4 if you have had very pleasant experiences with this group.

____(a) Foreigners (other than foreign college students)

____(b) Middle-class families

____(c) Jews

____(d) People who have not attended high school

____(e) Old folks

____(f) People of low I.Q.

____(g) Protestants

____(h) Delinquent children

____(i) Small-town people

____(j) Factory workers

____(k) Working mothers

____(l) Upper-class families

____(m) Farm people

____(n) Catholics

____(o) People who have attended college

____(p) City people

____(q) Lower-class families

____(r) Divorced people

____(s) People of a race different from yours

____(t) Parents (other than your own)

____(u) Teen-agers today

____(34-35) Do not write in this space.

Section D

Directions: Section D is concerned with how you feel today about different groups.

Respond to each item in the list, using the following code for indicating your responses. Give only one answer for each item.

Write 0 in front of the item if you strongly dislike people in that group.
Write 1 if you dislike them.
Write 2 if you are uncertain how you feel or have no definite feeling.
Write 3 if you like people in that group.
Write 4 if you very much like them.

____(a) Foreigners (other than foreign college students)

____(b) Middle-class families

____(c) Jews

____(d) People who have not attended high school

____(e) Old folks

____(f) People of low I.Q.

____(g) Protestants

____(h) Delinquent children

____(i) Small-town people

____(j) Factory workers

____(k) Working mothers

____(l) Upper-class families

____(m) Farm people

____(n) Catholics

____(o) People who have attended college

____(p) City people

____(q) Lower-class families

____(r) Divorced people

____(s) People of a race different from yours

____(t) Parents (other than your own)

____(u) Teen-agers today

____(36-37) Do not write in this space.

Section E

Directions: In this last section, you are asked to think about some feelings you have. This is perhaps the most important section of the form. So read the questions carefully, think and then write so another can understand how you feel and why. Since you began your junior year, your feelings may have changed toward some group (or groups). Think carefully before you answer.

____(29) If you feel there has been no change in your feelings toward any group, check (x) here.

A. If your feelings have become MORE favorable toward any group or groups, list the name(s) of the group(s) and describe your experience(s) which brought about the change.

Group(s)	Description of experience

B. If your feelings have become LESS favorable toward any group or groups, list the name(s) of the group(s), and describe your experience(s) which brought about the change.

Group(s)	Description of experience

JUST SUPPOSE INVENTORY
FIRST-YEAR TEACHER DATA FORM

For research purpose only

Name____Date__________

University where you received degree________________1 - 5__________

Section I

Directions: In Section I you are asked to indicate characteristics of the community where you lived while attending high school.

A. Most of the time you lived in what size community?

____(1) City of 100,000 or more
____(2) City of 25,000 to 100,000
____(3) City of 2,500 to 25,000
____(4) Town under 2,500
____(5) On a farm

. . . .

B-J. Check (x) all the terms below which are true of the community* in which you lived. Double check (xx) in each grouping the one which is most characteristic.

B. Socioeconomic classes represented in the community*

____(1) Lower
____(2) Middle
____(3) Upper

C. Occupations represented in the community*

____(1) Trades and industry
____(2) Farming
____(3) Clerical and sales
____(4) Business
____(5) Professional
____(6) Other (Specify)__________

____

*COMMUNITY--if you lived in a city--is defined as the area served by the high school you attended.

____

D. Educational level of adults in the community*

____(1) Below high school
____(2) Below college
____(3) College

E. Races represented in the community*

____(1) Negro
____(2) Oriental, Mexican and/or American Indian
____(3) White

F. Religious affiliation (or preference) of families in the community*

____(1) None
____(2) Jewish
____(3) Catholic
____(4) Protestant
____(5) Other (Specify)_________

G. Proportion of mothers employed outside the home in the community*

____(1) Few or none
____(2) Some
____(3) Many

H. Families in the community* who are of different national origin from yours

____(1) Few or none
____(2) Some
____(3) Many (If many, what nationalities?)

I. Discipline of children in the homes of the community*:

____(1) Poor in general
____(2) Average to good
____(3) Excellent

J. Interest in the school shown by parents of the community*:

____(1) Lacking
____(2) Average
____(3) Considerable

Section II

Directions: In this section you are asked to indicate characteristics of the area where you are now teaching.

K. The population of the town or city where you are now teaching is:

____(1) 100,000 or more
____(2) 25,000 to 100,000
____(3) 2,500 to 25,000
____(4) Under 2,500

. . . .

L-T. Check (x) all the terms below which are true of the school where you are teaching. Double check (xx) in each group the one which is most characteristic.

L. Socioeconomic classes of families represented in the school:

____(1) Lower
____(2) Middle
____(3) Upper

M. Occupations represented in the school:

____(1) Trades and industry
____(2) Farming
____(3) Clerical and sales
____(4) Business
____(5) Professional
____(6) Other (Specify)________________

N. Educational level of parents represented in the school:

____(1) Below high school
____(2) Below college
____(3) College

O. Races represented in the school:

____(1) Negro
____(2) Oriental, Mexican and/or American Indian
____(3) White

P. Religious affiliation (or preference) of families represented in the school:

____(1) None
____(2) Jewish
____(3) Catholic
____(4) Protestant
____(5) Other (Specify)_____________
____(6) Don't know

Q. Proportion of mothers of youth in the school who are employed outside the home:

____(1) Few or none
____(2) Some
____(3) Many

R. Families represented in the school who are of a different national origin from your own.

____(1) Few or none
____(2) Some
____(3) Many (If many, what nationalities?)

S. Discipline of children in the homes represented in the school:

____(1) Poor in general
____(2) Average to good
____(3) Excellent

---

*COMMUNITY--if you lived in a city--is defined as the area served by the high school you attended.

T. Interest in the school shown by parents:

____(1) Lacking
____(2) Average
____(3) Considerable

(6) _____ Do not write in this space.

(7) _____ Do not write in this space.

(8) _____ Do not write in this space.

Section III

Directions: Section III is concerned with the contacts you have had with different pupils this year and the extent to which you have experienced satisfaction in working with them.

Please respond to each item in the list. Use the following code for indicating your responses. Give only one answer for each item.

Write X in front of the item if you have had no close contacts this year with pupils of this type.
Write 0 if you have not felt satisfaction in working with pupils of this type.
Write 1 if you felt some satisfaction in working with pupils of this type.
Write 2 if you have felt much satisfaction in working with pupils of this type.

____(a) Pupils from middle-class families

____(b) Jewish pupils

____(c) Pupils with low I.Q.'s

____(d) Delinquent children

____(e) Pupils whose mothers work

____(f) Pupils from upper-class families

____(g) Protestant pupils

____(h) Pupils from farm homes

____(i) Pupils from lower-class families

____(j) Pupils with high I.Q.'s

____(k) Pupils whose parents are divorced

____(l) Pupils of a race different from yours

____(m) Pupils who are behavior problems in school

____(n) Catholic pupils

____(o) Pupils from small town homes

____(p) Pupils of a different national origin from your own

____(q) Pupils from city homes

____(9-10) Do not write in this space.

____(11-12) Do not write in this space.

Section IV

Directions: This section deals with the ways in which you have come during this first year of teaching to really know homes and families different from your own.

____(13) If you feel that during this year you really have not known any homes and families very different from your own, please check (x) here and omit the rest of this section.

If during this year you have learned to know some homes and families very different from your own, list the types of homes and families below. (See Section III for types.)

(14-28) In the following lists of experiences, check (x) all which have helped you know the groups you have listed above. Do not check the experience unless you had it some time during this first year of teaching.

____(14) Living in a home of the community

____(15) Dating someone from a different background than mine

____(16) Visiting in the homes of my pupils

____(17) Participating in church and/or Sunday School activities

____(18) Working with others in organizations

____(19) Reading, movies, television

____(20) Contacts with social service agencies (Settlement House, Well Baby Clinic, etc.)

____(21) Casual contacts with parents in stores, public transportation, Farm Bureau meetings, women's club, etc.

____(22) Acting as a counselor or advisor to individual pupils or to classes in the school

____(23) Making a case study of one (or more) of my pupils

____(24) Entertaining parents in the home economics department

____(25) Participating in social activities of the community

____(26) Observing people at work in various industries of the community

____(27) Seeing pupils in situations outside of school

____(28) Others (Specify)

____(29-30) Do not write in this space.

Section V

Directions: In this section you are asked to think about some feelings you have. This is a most important section of the form. So read the directions carefully, think, and then write so another can understand how you feel and why. Since you started to teach, your feelings may have changed toward some group (or groups).

______(6) If you feel there has been no change in your feelings toward any group since you started to teach, check (x) here. Think carefully before you answer.

A. If your feelings this year have become MORE favorable toward any group or groups, list the name(s) and describe your experience(s) which brought about the change.

Group(s)	Description of experience

B. If your feelings this year have become LESS favorable toward any group or groups, list the name(s) of the group(s) and describe your experience(s) which brought about the change.

Group(s)	Description of experience

Section VI

Directions: In this section you are asked to tell something about your school situation this year. Please be frank. The information you give--as in the previous pages of this form-- will be kept confidential.

31. Have you found discipline to be a problem in your classes? (Check only one)

____(1) No, not at all.
____(2) Only occasionally
____(3) Discipline situations sometimes arose, but I did not consider them a problem.
____(4) Often was a problem.
____(5) Yes, very difficult for me.

32. How would you describe the general attitude of the administration and faculty toward home economics? (Check only one.)

____(1) Most favorable; promote home economics in the school and/or community
____(2) Friendly toward the program
____(3) Rather neutral in attitude or administration has one attitude, faculty the opposite
____(4) Unfriendly
____(5) Antagonistic; see no value in home economics as a general school subject; may even deride it to others

33. Check the one statement which best tells how you really feel about teaching most of the time.

____(1) I greatly dislike it.
____(2) I do not like it.
____(3) I am indifferent to it.
____(4) I like it.
____(5) I greatly enjoy it.

34. What girls have you had in your home economics classes? (Check only one.)

____(1) The most intelligent and capable girls in the school.
____(2) Mostly the bright girls, with a few dull ones.
____(3) Rather evenly balanced in intelligence.
____(4) Mostly the low-average girls, with occasionally a few bright ones.
____(5) The "dumbbells"--only those who were not thought capable of going on to college.

35. Choose the one statement which best tells how you now feel about working with young people:

____(1) I have found work with young people to be uninteresting and dull.
____(2) I have no special feeling of liking or disliking young people; I accept them as part of the school job.
____(3) Seeing young people develop under my guidance has given my some of my greatest satisfactions in teaching.
____(4) I have discovered that working with young people in school is very distasteful to me.
____(5) I have found work with young people very pleasant and stimulating.

Table XXXIV: VALUES OF CHI-SQUARE SHOWING ASSOCIATION BETWEEN THE PLEASANTNESS OF EXPERIENCE WITH GROUPS AS REPORTED BY JUNIORS AND THEIR PROBLEM AND TOTAL SCORES

	Problem	Values of Chi-Square
I	Parents today	4.635*
II-1	City people	9.528*
II-2	Small-town people	13.282**
II-3	Farm people	7.842**
III-1	Divorced persons	8.863**
III-2	Working mothers	8.946**
IV	Foreigners	2.546
V-1	Adults with little education	9.091**
V-2	Adults with college education	
VI	Slum families	9.250**
VII-1	Catholics	15.869**
VII-2	Jews	11.269**
VII-3	Protestants	
VIII-1	Upper-class people	11.143**
VIII-2	Middle-class people	
IX	A problem school	2.800
X	Factory workers	10.388**
XI	Persons of another race	15.290**
XII-1	Youth	3.144
XII-2	The aged	6.371*
	TOTAL	28.89**

*Significant at the 5 per cent level.
**Significant at the 1 per cent level.